

# **AIRFIX** magazine

APRIL 1972

**FOR PLASTIC MODELLERS**

**15p**

MONTHLY



**IN  
THIS  
ISSUE**

**SAAF Dakotas: Colour schemes and markings**  
**Making a model 17 pounder anti-tank gun**





All Humbrol quality enamels are available in separate tinlets or in tinlet palettes—attractive and convenient interlocking plastic trays with space for brushes and accessories.

# Skill, patience and Humbrol

Or should it be Humbrol, patience and skill? Either way, these are the three most important qualities for successful modelling.

Skill and patience—well, most serious modellers have them. Humbrol is the quality they all need. Used by modellers the world over, Humbrol enamels (matt or gloss, lead free and non-toxic) are the best value for money on the modelling market... only 7p for 15ml. Research has established that craftsmen prefer model paint in tins which keep the paint in good condition, are unbreakable and much safer than any other type of container—this is why Humbrol is packed in handy sized tinlets.

You'll find the colour you're looking for in the Humbrol range. Ask for Humbrol by name... available from all leading Model and Toy Shops.



Balsa cement 66 for sticking balsa models. Med. tube 6p  
White PVA 55 for sticking wooden models. Med. tube 10p.  
Polystyrene cement 77 for sticking plastic models. Med. tube 6p.  
All Britfix tubes have a specially designed shoulder cap with internal spigot preventing blockage of nozzle and giving immediate flow when cap is removed.

Humbrol will be pleased to send you—FREE—colour cards and leaflets giving you full details of the extensive range of enamels and other Humbrol quality products for the modeller. Write today to Mr. H. Stewart, Modelling Division, Humbrol Limited, Marfleet, Hull.

**HUMBROL**  
HULL YORKSHIRE

# NEW FIGURES FROM HISTOREX

available end of March 1972. Customers who have our catalogue send s.a.e. for sheet No. 17.

## Imperial Guard Scouts 1813-14 (Mounted figures)

- 712 1st Regt.: Scout Grenadiers (wearing regulation shako and pelisse).
  - 713 2nd Regt.: Scout Dragoons (wearing special shako and buttoned coat).
  - 714 3rd Regt.: Scout Lancers (wearing chapska and kurtka).
- In each of the above regiments the following ranks are available.  
Officer : Trumpeter : Scout-Carabinier : Scout-Lancer.  
All new kits contain superb full colour illustrations.



## FOOT FIGURES

- 715 Engineer Corps of the Guard, 1810-14
- Officer each rank available in one of the following positions.  
N.C.O. attention, present arms,  
Drummer parade march or attack march  
Soldier

Foot Figures cost 80p;

8p postage and packing on all orders for figures under £5. Over £5 free.  
Available from Stockists or direct from



Mounted Figures cost £1.65

**HISTOREX AGENTS - 3 CASTLE STREET, DOVER**



STOPPEL HOBBY SHOP, GL. KONGEVEJ 154, DK-1850 COPENHAGEN V. DENMARK.  
Postal account: 115754. Phone: (01) 310155

**DELFIN L.29**  
35p incl. postage

**IL. 10**  
70p incl. postage  
1:72 all 3 models

**AVIA B.534**  
55p incl. postage

Scandinavian specialist  
in plastic kits



Associate member  
**I.P.M.S.**

**MODELMAKERS all over the world** write for full catalog 45p

OVERSEAS TRADERS WRITE FOR FULL PRICE AND TRADE TERMS

## INTERNATIONAL PLASTIC MODELLERS SOCIETY

By Modellers — For Modellers  
Branches throughout the world  
Plus 26 Regional UK Branches  
offer **YOU**

**I** INFORMATION EXCLUSIVE TO MEMBERS  
**P** PLASTIC KIT REVIEWS. EXPERT GUIDANCE  
**M** MONTHLY MAGAZINE WITH LATEST NEWS  
**S** SOCIAL MONTHLY MEETINGS WITH COMPETITIONS AND DISCUSSIONS

### INTERESTED ?

For details plus sample magazine send 10p to:  
IPMS Publications (Dept. AF),

35 Clares Green Road, Spencers Wood,  
Reading, England

## BELLONA

*First in the field and still the best*  
Wargame scenery & landscape models



B.3. Two Bunkers+One in Ruins—19p

\* More than 30 super detail sets all to 1/72 scale.  
\* Many of them can be combined together to make large table top settings  
\* Diorama range also ideal as individual set pieces  
\* Many sets include removable pill boxes, trench and bunker roofs  
Defence Works and Landscape Features 19p each  
Large Diorama Fortification Sets 54p each  
Also Armtec A.F.V. Accessories to super detail your tanks and vehicles. Set 1—7 19p each  
Armtec Hetzer Tank Kit 1/76 scale 11.25 each  
Send S.A.E. for catalogue to makers  
**MICRO-MOLD PLASTICS, I. Unifax Way, Goring-by-Sea, Sussex**  
Tel. Worthing 46999

**POSTAGE AND PACKING**  
Up to 50p, 5p Up to £1, 10p  
Up to £2, 15p Up to £3, 20p  
Up to £4, 25p Over £5 Free  
**OVERSEAS POSTAGE RATES**  
Airmail, Australia Min. 60p for  
1 lb. Plus 60p for each add. 1 lb.  
New Zealand same as Australia.  
South Africa, Canada and U.S.A.  
Min. \$.88 for 1 lb. plus \$.88 for  
each add. 1 lb.

ORDERS AND ENQUIRIES TO  
DEPT. AMII

## BRIDGE MODELS

*The world is our market*

**MAIL-ORDER  
A  
SPECIALITY**

Telephone:  
01-520 4565

1-2 STATION PARADE, HOE STREET BRIDGE, WALTHAMSTOW, LONDON, E.17

### AMT TRUCKS 1/25th scale

Ford Dump Truck	£5.07
Ford Short Hauler	£5.07
Kenworth Transit Mixer	£6.99
Ford Race-Car Hauler	£5.07
Chevy Rescue Van	£2.55
California Hauler	£4.20
Peterbilt Cabover	£4.20
Chevy Titan	£4.20
Ford LNT 8000	£4.20
Kenworth Tractor	£4.20
Fruehauf Tank Trailer	£4.20
Fruehauf Box Trailer	£4.20
Haulaway 5-car Transporter	£4.20

Also in stock, large selection of AMT  
1/25th car kits.

### TAMIYA 1/18th CARS

All Motorised	
Honda N360 Mini	£1.80
Volkswagen Buggy	£2.99
Porsche Carrera '910'	£2.99
Nissan R381	£2.99
McLaren M8	£2.99
Lola T160 TS	£2.99
Subaru R2 Mini	£1.80

### TAMIYA 1/12th CARS

Ferrari 312B	£4.40
Lotus 49	£4.40
Lotus 49B	£4.40
Matra MSII	£4.40
Lola T70	£7.99
Porsche 910	£6.50
1/12th scale driver	35p

**"MANY, MANY" MORE CARS IN STOCK FROM 17p — £57.00.** BY:—  
AIRFIX, REVELL, AURORA, AMT, MPC, BANDAI, TAMIYA, EIDAI, MONO-  
GRAM, NAGANO, MATZ, NAKAMURA, MIDORI, OTAKI, NICHIMO, FUJIMI,  
POCHER, ETC; . . . ALSO RENWAL VISIBLE V-8 ENGINE — £10, AND  
CHASSIS — £18, FANTASTIC 1/4 SCALE WITH HUNDREDS OF MOVING  
PARTS.

### TAMIYA TANKS 1/35th

Motorised	
Saladin Armoured Car	£1.15
T34 Russian Tank	£1.40
SU100 Russian SPG	£1.40
TS5 Russian Tank	£1.60
M4 Sherman	£1.60
M41 Tank	£1.60
M42 Duster	£1.80
JSIII Stalin	£2.30
Chieftain	£2.30
Japanese Type 61	£2.30
König Tiger	£2.30
Jagd Tiger	£2.30
Sheridan M351	£2.30
Leopard	£2.30
Tiger I	£2.30
Panther V	£2.30
Jagdpanzer V	£2.30
M60-A1 Tank	£2.60
Centurion Mk III	£2.60
M8 Armoured Car	99p

### TAMIYA 1/35—Remote Control

Russian SU100	£2.25
Russian T34	£2.25
M42 Duster	£2.40
M4 Sherman	£2.40
M41 Bulldog	£2.40
Jagdpanzer V	£2.99
Panther V	£2.99
JS III Stalin	£2.99
Tiger I	£2.99
Jagd Tiger	£2.99
König Tiger	£2.99
Leopard	£2.99
M60 Cheyenne	£3.50

### 1/35th Un-motorised

Schwimmwagen	70p
Kubelwagen	70p
6 pdr Anti-Tank Gun	70p
Pzkw II+4 Afrika Korps	99p
Pzkw III+German Officers	£1.85

### TANKS 1/25—1/21 Remote Control

Tiger I (Interior detail)	£7.99
Chieftain	£6.99
Panther V	£6.99
Jagdpanzer	£6.99
T34 Tank	£5.70
SU100 SPG	£5.70
U.S. Big Shot 1/21st	£5.70

### 1/25—1/21 Motorised

T34 Tank—1/25	£4.50
Chieftain—1/25	£5.30
M4 Sherman—1/21	£3.99
Pzkw III—1/21	£3.99
Sturmgeschütz—1/21	£3.99
SU100 SPG—1/21	£4.50

### Un-motorised

Tiger I (Interior detail)—1/25	£6.50
M2 155 mm Gun—1/21	£1.75

### REVELL AIRCRAFT

Full range of 1/32nd scale.  
Including recent releases:—  
**FW190 and Me262.**

Also, large selection of 1/72nd scale.

SUBJECT TO AVAILABILITY,  
**FULL RANGE OF AIRFIX.**

**BOOKS — TOOLS — PAINT**

**'RADIO CONTROL CARS'**

**POCHER & MANTUA CANNON,  
SHIPS, SPACE, FIGURINES, ETC:  
TOO MUCH TO LIST**

Fer gawd sakes come an' see fer  
yerself!



# LOCO PROFILE 212 AFV 13

## PROFILE BY MAIL ORDER

### IMPORTANT NOTICE

We regret to inform all customers that there will be price increases on various PROFILE PUBLICATIONS on the 1st APRIL, 1972.

ALL ORDERS RECEIVED THROUGHOUT APRIL will be despatched AT THE OLD PRICE. (Aircraft, A.F.V., Warships, Loco, Small Arms, Binders, Bound Volumes) ORDER NOW.

A S.A.E. will bring your full colour broadsheet on all Profiles Squadron Histories Vol. 1 £2.50. Hard cover, send a S.A.E. for leaflet

**BADGER**  
**AIR BRUSHES**  
**GENUINE AIRBRUSH**  
**PERFORMANCE, £3.85**  
Fingertip air trigger control, adjustable paint flow. Complete with air hose and clip on air valve to fit standard aerosol power pack, two paint jars. (Works off Humbrol, or other power packs 60p or 85p) or inflated tyre. (Tyre adaptor 55p).

**OVERALL SPRAYING**  
**OR FINE DETAIL**  
**U.S. SCALE**  
**MODELLER**  
**NOW IN STOCK**  
Jan. Feb. March, April 1972. 67p each & 5p post



#### AIR CONVERSIONS

**HUNTER, T.7. 2 seat** 45p  
NOT A VAC FORM KIT, SOLID MOULDED SURFACES. Pack complete with canopy, solid nose section. Use with Airfix Hunter kit.

#### DECALS

**ALMARK, DRI DEC. ABT. ESCI, STOPPEL. OUR NEW**  
**LISTS NOW READY.**  
25p + 5p post.

## ALL KITS BY

**Hasegawa**

**Heller**

**Revell**

1972 CATALOGUE  
12p & 3p post

**FROG**

CATALOGUE  
12p & 3p post

**Monogram**  
quality hobby kits

**AIRFIX**

1972 CATALOGUE  
15p & 5p post

**TAMIYA**

RIKO CATALOGUE  
6p & 3p post

**ITALAEREI**

Up to £1.50 (13p)  
Up to £3.00 (25p)  
Up to £5.00 (29p)  
Over £5.00 Post Free  
S.A.E. with all enquiries please. Overseas rates on application.  
(Subject to STOCK AVAILABILITY)

## CONVERSION CORNER



SCRATCH BUILT by E. HOLMES  
(I.P.M.S. winner) using our plastikard

THIS, and all other Models appearing in our ads. over the past months can be seen in our shop, OR, if you cannot visit us, SEND A STAMPED ADDRESSED ENVELOPE for a Broadsheet with illustrations of the Models and a complete list of Plastikard, Rod, Microstrip, Plastic Girder sections, Devcon, Metalskin, Mek Pak Liquid Cement, Body Putty, Knives, Tools, Paints, etc.

## RAREPLANES



**NEW. LAVOTCHKIN L.A.5**  
1/72 scale  
Also in stock—66p each  
H.S. 126 HE.112  
Grumman F.3F Ryan P.T.20  
Curtis Demon Northrop A/17A

**LATEST**  
1/72  
**BREDA 65**  
66p



# ERNEST BERWICK

## THE MODEL SPECIALISTS

11A NEWLAND STREET, KETTERING, NORTHANTS., ENGLAND. Telephone KETTERING 5998

A.G. CLARKSON R.C. SEDDON M. CLARKSON

## POST FREE ANY 'AIRFIX' KIT

SERIES I 19p, II 25p, III 35p, IV 55p, V 69p, VI 89p, VII £1.10, VIII £1.29, VIII £1.35, XII £2.20, etc.

ALSO ANY 'REVELL' 1/32 SCALE AND THE FOLLOWING 'FROG' KITS  
Vampire, Mustang, FW152F, ME109F, Hurricane (all 21p)  
B. Burn Shark, ME410, D.H. Hornet, Westland Wessex (all 29p)  
Super Sabre, Thunderchief, Sky Hawk, Hawker Harrier (all 50p)

**THE MODEL DEPT., CATOR SHOPS LTD.**  
56 Fore St., Brixham, Devon  
Phone 2685 Member I.P.M.S.

OFFER APPLIES TO UK ONLY & CLOSING APRIL 30th, 1972

## NEW MOULDED BATTLEGROUND 12" x 12" OO/HO Scale

Ruined Cottage  
Ruined House  
Stone Bridge  
Block House  
Hill Fortification

Gun Emplacement  
Trench Layout (3 types)  
Wrecked Vehicle  
Supply Dump  
Crashed Aeroplane

Price 30p each, postage 5p

**H. A. BLUNT & SONS LTD**

Mill Hill Circus  
London NW7 4RN  
Phone 01-959 2877

38 Fretherne Road  
Welwyn Garden City  
Herts. Phone 26884



No. 85 X-acto De Luxe Knife and Tool Set. Holds Nos. 1, 2, and 6 knives and an entire assortment of blades, gouges, routers, punches plus planer, 2 in. sander, hobbycraft saw, 2 razor saw blades, spokeshave, pin vise, screwdriver, assorted drill bits in wooden box complete with see-thru cover and fitted plastic insert that holds and shows every tool.



No. 86 X-acto Burlington Hobby Chest. Complete selection of tools in fitted cabinet.

## More skill at your fingertips with x-acto KNIVES TOOLS & TOOL SETS



No. 53 X-acto Razor Saw Set. Complete with 2 different blades. There is no other tool that can compete with this unique fine cutting instrument. In constant use by modellers everywhere.



No. 82 X-acto Knife Chest. Contains Nos. 1, 2, and 5 knives plus a wide assortment of blades.



No. 45 X-acto Spoke Shave. (Refill blades available.)



No. 40 X-acto Block Planer. (Refill blades available.)



No. 41 X-acto 1 in. Sander. (Also No. 42 X-acto 2 in. Sander.) Sander refills available.



No. 5 X-acto Knife, for heavy cutting, with blade.



No. 2 X-acto Knife, heavy aluminium handle, with blade.

**x-acto at all modelling shops**



247 ARGYLE ST., 103 HIGH ST.,  
GLASGOW C.2, ARGYLE EDINBURGH 1,  
041-248-6680 MODELS 031-556-4402

**Britain's leading model shop**

## NEW AIRMODEL

**NEW FROM ITALIAERI:**  
**SPECIAL OFFER** Republic F84F Thunderstreak 99p  
Republic RF84F Thunderflash each  
Also available Fiat G55 55p  
Reggiane RE2002 55p  
Reggiane RE2001 55p  
Reggiane RE2000 55p  
Caproni CA313/314 £1.50  
Fiat BR20 £1.75

## NEW From AIRMODEL COMPLETE

123 Dornier DO18 Flying Boat (Three versions) £1.50  
124 Dornier DO23 Bomber £1.50  
125 Heinkel HE42 (Seaplane Trainer) 75p

**DECALS**  
221 North American F-86D Sabre (Korea & Philippines)  
222 Royal Canadian Air Force 'Golden Hawks' and  
Red Knights Aerobatic Teams  
Only 40p each

**SPECIAL OFFER**  
121 N. American F86D Conversion Fuselage  
221-1 Decals for F86D  
Hasegawa F86D  
All three for only 85p!

## NOW AVAILABLE—NEW!

No. 129 Gotha GO242/244 Complete kit £1.50  
No. 126 Gotha GO229 Complete kit 75p  
No. 130 Dornier DO17E/FDM, DO215B, DO17KA 30p

Also available: **Conversion Kit**  
No. 2 HEIII H-4/6 Injection Moulded Conversions 35p  
Parts may be used for all HE.III versions  
with similar shape  
No. 6 Lockheed F-104A/TF-104G Starfighter 35p  
Parts may be used for F104C, F-104F, CF-104's

Still available in the popular Vacuum Formed Series  
105 Supermarine Spitfire/Hawker Sea Fury T20/  
Hawker Typhoon 1A/Briston Beaufigther

Set of four 20p  
116 Vickers Armstrong Wellington XXIV 25p

**NEW RANGE OF MICRODECALS** from the USA.  
Probably the most authentic ever produced. Send  
S.A.E. for list. Both Aircraft and AFV decals.

**NEW: ARGYLE BOOK LIST:** Aircraft/Ship/AFV's/  
Uniforms — only 5p and S.A.E. (state interest).

**PLASTY-DECALS 50p each**  
002 Consists of decals enabling you to make marking  
of any nationality—9 pages of decals. Useful for the  
beginner and the modeller.  
001 6 pages of emblems, insignias, numbers, crosses  
and stripes for the Luftwaffe.

**MAIL ORDER SERVICE: Glasgow only.** All orders  
normally despatched within 24 hours. Money back  
guarantee of satisfaction. UK orders add 5% (minimum  
10p) for post and packing. Overseas extra.

## WARGAMES RESEARCH GROUP

The next in the series on Ancient Armies—  
"The Armies and Enemies of Imperial Rome, 150 BC to  
600 AD." 80 pages, 120 major, and many minor black and  
white drawings of troop types, animals, engines, shield  
patterns, etc., with full descriptive text, and sections on  
Tactics, Organisation and short accounts of principal  
battles. £1.75, postage paid in UK, \$6.00 USA.  
Also, "Armies of the Macedonian and Punic Wars"  
350 to 150 BC. 60 pages, 80 drawings,  
£1.30 post free UK, \$4.25 USA.

Both these books are essential reference sources for  
model makers and wargamers in the "Ancient" period,  
as are our Wargames Rules 1,000 BC to 1,000 AD.  
These are the most comprehensive and enjoyable rules  
in any period, including provision for Field Engineering,  
Weather, Scouting, Forced marches—anything the  
Ancients did, you can do!  
70p including postage in UK, \$2.50 USA.

Also, wargames rules for—  
1750 to 1850 (including Napoleonic) 20, 25, or 30 mm  
figures.  
1925 to 1975 Infantry Action. For 20 mm or 54 mm  
figure scales.

Each 48p including postage in UK, \$2.00 USA.  
A number of book and model shops have seen the light  
and are stocking our books, but if unobtainable locally,  
order from—

**WARGAMES RESEARCH GROUP**  
75 Ardingly Drive, Goring by Sea, Sussex

## CAMPAIGN COLOURS

[ An oil bound poster paint specially developed for the painting  
of model soldiers for the collector and wargamer. ]

Although this range of colours for the military modeller was  
only introduced a few months ago its popularity has amazed  
even us. We knew there was a market for a paint equally at home  
on metal or plastic, capable of being applied in a thin coat to  
avoid masking fine detail and drying slowly enough to allow  
working and blending—so we produced it. But how large a  
market we didn't know until now. Maybe it's because it is pro-  
duced by wargamers for wargamers—comes in eighteen dif-  
ferent colours and is—for its high quality—inexpensive. Maybe  
it's because we are trying hard to boomerang the stuff back by  
return of post direct to you. It may even be that lucky mascot  
"Mushie" on the shelf.

**Colours available:** British Scarlet, Orange, Brown, Yellow,  
Yellow Ochre, Chasseur Green, Rifle Green, French Artillery  
Green, Royal Blue, French Blue, Sky Blue, Prussian Dragoon  
Blue, Black, White, Flesh, Military Grey, Gold and Silver.

In boxes of 10 at 90p p.p. 10p. Individual colours 9p.  
Gold Powder 18p.

**TRADE ENQUIRIES WELCOMED**

**COINS AND MILITAIRE**  
25 and 31 PRINCES AVENUE  
HULL, HU5 3RX  
Telephone 0482-407447

## SOLDIER CENTRE

94 ST. CLEMENTS, OXFORD

Telephone: 40551

MEMBERS OF THE B.M.S.S.

### ROSE FIGURES

Ancients — French Napoleonic — British Napoleonic  
— W.W.I — W.W.II. 54 mm Figures.

Rose Figures are cast to a high standard of detail  
and character complete with painting instructions  
from £1.06.

Catalogue 19p including new supplements.

### 'Soldier Centres' Reference Section:

British Yeomanry Uniforms	£7.00
German Army Uniforms & Insignia	£4.25
British Military Uniforms	£2.25
The Universal Soldier	£4.50
Battle Dress	£4.20
History of Warfare	£5.50

Tamiya — Hasegawa — Revell — Pyro kits. Always a  
good selection in stock, plus Profile and Almark  
publications.

### Napoleonic WARGAMES FIGURES by S.E.G.O.M.

What you have always wanted perfectly proportioned wargames  
figures in correct anatomical scale. Easily converted to your  
requirements. Matching the popular 25 mm scale. Make a superb  
diorama at little cost. Latest issues:

Marshal of France Mounted—British Rifleman—  
British Guardsman  
French Grenadiers of the Guard  
Officer—Colour Bearer—Drummer—Grenadier  
French Line Infantry  
Officer—Colour Bearer—Infantryman  
French Light Infantryman  
French Artillery Man. (This is a combination figure moulded  
with four arms to give various positions).

Allied Armies  
British Line Officer—Colour Bearer—British Infantryman  
Highland Officer in Trews—Colour Bearer—Highland Infantry-  
man in Kilt

Prussian Officer—Colour Bearer—Prussian Infantryman  
Austrian Officer—Colour Bearer—Austrian Infantryman—  
Austrian Grenadier

Russian Officer—Colour Bearer—Russian Infantryman  
Napoleonic Cavalry  
(Riders are all combination figures moulded with three arms.  
Horses are separate).

French Hussar in Shako—French Hussar in Colback—French  
Lancer

French Dragoon—French Cuirassier—Prussian Lancer—  
Russian Cuirassier

Standard Bearers are available for all cavalry listed.  
Foot Figures 71p each. Colour Bearer Foot 15p each  
Cavalry Figures 20p each. Cavalry Standard Bearers 25p each

Postage and Packing 5p per order.

LISTS FREE

Sole Agents for U.K.

**MODEL FIGURES & HOBBIES**

8 College Square North, Belfast BT1 6AS



**HINCHLIFFE MODELS**

MELTHAM, HUDDERSFIELD, HD7 3NX, ENGLAND.

### NEW 20 mm RELEASES

20/21 Colonial Baggage Wagon Rec. Retail Price £1.12

### WORLD WAR II

20/22 German 10.5 cm Light Field Howitzer L/28	75p
G1 German Infantryman—advancing	7p
G2 German Infantry N.C.O.—with machine pistol	7p
G3 German Panzer Grenadier—advancing	7p
G4 German Infantryman—kneeling	7p
G5 German Artilleryman—hands to ears	7p
G6 German Artilleryman—kneeling	7p
G7 German Artilleryman—with rangefinder	7p
G8 German Artillery Officer—with binoculars	7p
G9 German Paratrooper—advancing	7p
A1 American Infantryman—advancing	7p

Single figure prices as above, box of eleven 75p

At your retailers now or in case of difficulty,  
write direct.

## HOWELL DIMMOCK LTD

38-40 LORDSHIP LANE, TOTTENHAM  
LONDON N17 8NT, ENGLAND Phone 01-808 5675

**WORLD-WIDE MAIL ORDER SPECIALISTS**

**BRASS SHEET**  
All brass sheet is sent carriage paid.  
Just send the Price indicated below.  
Prices are per single sheet.

1. 12" x 6" x .012"	24p
2. 12" x 6" x .014"	24p
3. 12" x 1" x .055"	18p
4. 12" x 13" x .038"	30p
5. 11" x 6" x .035"	40p
6. 13" x 6" x .027"	40p

**PLASTICARD**  
10 thou. white 5p  
15 thou. white 6p  
20 thou. white 7p  
30 thou. white 11p  
40 thou. white 16p  
60 thou. white 25p

**PLASTIGLAZE**  
10 thou. clear 8p  
20 thou. clear 15p

Please add post and packing  
**PAINTING**

We are now extending our painting  
service to cover all types of figures.  
Full details should be available when  
this advert appears; cost will depend  
on detail required. One important  
part of our service will be to paint  
your own figures.

**PAINTING AND LINING**  
The introduction of the above  
service does not interfere with our  
painting and lining of locomotives.  
Send for full details of our unbeat-  
able service, unbeatable in price,  
delivery time and quality. All our  
work is guaranteed to be first class—  
Satisfaction is our aim. Locomotives,  
Coaches, Wagons, Signals from 'N'  
gauge to 7½ inch gauge are all in-  
cluded in our service. When sending  
for details please state gauge you are  
working in, S.A.E. only please.

**POST—INLAND**  
All orders over £5.00 post free.  
Orders up to £5.00 please add 10%  
unless otherwise stated  
Minimum—10p

**EXPORT**  
Please write to us with your require-  
ments and we will be happy to  
proforma

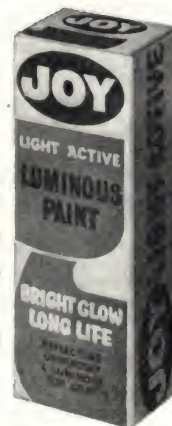




See in the dark with JOY Luminous Paint. Ideal for use on skeletons, toys, models, novelties, light switches, door numbers, paper, cardboard, and materials etc.

Light active but not radio active. Outfits contain Base Reflecting Coat and Top Luminous Coat. Green shade only.

JOY is a registered trade mark of TURNBRIDGES LTD., LONDON, S.W.17.



# AIRFIX

magazine  
FOR PLASTIC MODELLERS

April 1972

Editorial Offices:  
PSL Publications Ltd  
9 Ely Place  
London, EC1N 6SQ  
Tel: 01-405 2297

Volume 13 No 8

Editor: Chris Ellis

## Cover Picture

The venerable Dakota continues to give faithful service to scores of operators, both military and civil, all over the world. The South African Air Force remains a major user and a colourful machine from their fleet is 6877 which was converted to a target-tug some years ago. The winch under the centre section and the tailwheel guards are the main external changes. The 'traditional' black and yellow striping for target-tugs is much in evidence and clearly this aircraft would make a striking conversion subject for the Airfix Dakota kit. An article on South African Air Force Dakotas and their colour schemes starts on page 435 in this issue.

(Photograph by Dave Becker)

## Contents

Battle of Tewkesbury: diorama built and described by Geoffrey Wheeler	418
17 pdr Anti-Tank Gun: modelled and described by T. J. Gander	420
Kingfisher: famous floatplane history and markings by Alan W. Hall	423
Russian Infantry Weapons: modelled by Bob O'Brien	430
Layout Planning: more ideas and tips from Michael Andress	434
SAAF Dakotas: markings described by Richard Gardner and Dave Becker	435
Photopage: more rare aircraft pictures from readers	443
Crusader AA Tank: described and modelled by Gerald Scarborough	444
Books: new publications of interest to readers	447
Bombing Colours: Victory in the East by Michael J. F. Bowyer	448
Model Soldiers: modelling a staff car by Roy Dilley	453
Ford Hot Rod: simple conversion by Martin De'Ath	454
New Kits and Models: latest releases reviewed for modellers	456
Letters to the Editor: your chance to win a free Airfix kit	460
Sopwith 1½ Strutter: advanced conversion by J. F. Chapman	462

Next publication date:  
April 28, 1972

Advertisement Representatives:  
Jackson-Rudd & Associates Ltd  
84-86 Gray's Inn Road  
Martin House  
London, WC1

## Circulation Department:

Surridge Dawson & Company (Productions) Ltd  
Publishing Department, 136/142 New Kent Road, London, SE1  
Telephone: 01-703 5480

Airfix Magazine is published for the proprietors, Airfix Products Ltd, by PSL Publications Limited, on the fourth Friday of each month. Annual subscription rate £2.52 (USA \$6.75) from Surridge Dawson & Company (Productions) Ltd. Second Class postage paid at New York Post Office, N.Y.

© All articles and illustrations published in AIRFIX MAGAZINE are strictly copyright, and may not be reproduced without written permission from the Publishers. The Editor welcomes the submission of editorial material, which should be accompanied by return postage. Though every care is taken, the publishers cannot accept responsibility for safe keeping of editorial contributions.

Advertisement Manager: Jim Boyd  
Tel: 01-405 3611

April 1972



MEMBER OF THE AUDIT  
BUREAU OF CIRCULATIONS





# Museum Diorama

25 mm scale diorama made from converted Airfix figures

by Geoffrey Wheeler

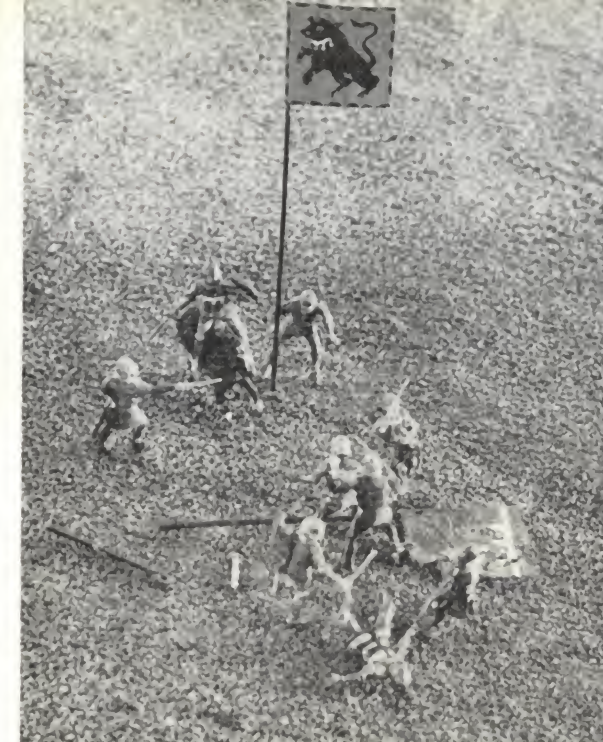
MAY 4, 1971, saw the 500th anniversary of the Battle of Tewkesbury, one of the final conflicts between York and Lancaster in the series of battles later known as the 'Wars of the Roses'. The Lancastrians, with the hope of reaching reinforcements in Wales, had made a forced march through Gloucestershire in a race for the Severn crossing, hotly pursued by the Yorkist army. At Tewkesbury, on the river's bank, they chose to stand and defend their position in the meadows to the south of the town. Here Queen Margaret deployed her troops in the usual three divisions on the rising ground to the rear of Gupshill Manor. Nominal command of the centre of her army was entrusted to her young son, Prince Edward, aided by Lord Wenlock, with the Duke of Somerset in charge of the right division, and the left commanded by the Earl of Devon. Opposing them, on a front some 700 yards long, ranged the Yorkist forces, led by King Edward IV, with his brother Richard, Duke of Gloucester, in the vanguard, and the right wing under Lord Hastings. After an initial attack by Somerset on to the King's division, Gloucester retaliated, and charged into the assault. This move was reinforced by a surprise flank attack from a concealed ambush by Yorkist cavalry, upon the rear of Somerset's troops, and in the resulting confusion the Lancastrians were soon routed.

As part of the Quincentenary celebrations a large scale model diorama of the Battle was constructed for the centrepiece of a

**Top left:** The centre of the battlefield from the south-east. **Left to right foreground:** The Yorkist forces of Clarence, King Edward IV and Lord Hastings. The Yorkist ambush (top left) charges the rear of Somerset's division fighting with Gloucester around Gupshill Manor. On the ridge to the rear of the Lancastrian lines of Prince Edward, Lord Wenlock and Devonshire. **Above:** Centre of the model showing Yorkist forces in the foreground, with the Lancastrians to the rear of Gupshill Manor.

commemorative exhibition in Tewkesbury museum. The display is now a permanent feature there, together with battle relics, photographs of memorials to some of the participants and relevant documents. The model shows the decisive moment when the Yorkist ambush charges on to the fighting forces of Gloucester and Somerset, with the remaining divisions drawn up in battle formation opposite each other.

Later incidents depicted include the death of Prince Edward, the Lancastrian heir, the killing of Lord Wenlock, accused of treachery by Somerset for not supporting his charge, and the slaughter of Lancastrian refugees fleeing towards the town in the 'Bloody Meadow'. In order to present as large an area of the battlefield as possible within the dimensions of the room provided, it was evident that 25 mm scale model soldiers would have to be used. The standard Airfix HO/OO range 'Sheriff of Nottingham' and 'Robin Hood' series were also the most economical to obtain in large numbers, although strictly 14th rather than 15th century in details of armour. It was decided that a surface area of 12 feet x 6 feet would take in a large part of the battlefield, centred on Gupshill Manor, now an inn, on the main Tewkesbury to Cheltenham road. This would also include a corner of the wooded hill which concealed the ambush, with the river and 'Bloody Meadow' to the north, and the eastern side bounded by the Swillgate Brook, which marked the extremity of both armies. With allowances for alterations in the present-day appearance of the ground, the contours were mapped out from aerial photographs and Ordnance Survey maps, and graphically transferred to the base. The prominent features of the hill and plateau were marked with wooden blocks over which was fixed a layer of chicken-wire, covered with newspaper strips in papier maché until the desired thickness of ground was built up. Whilst the



**Above, top to bottom:** Yorkist leaders (left to right) John Mowbray, Duke of Norfolk; Richard, Duke of Gloucester; King Edward IV; George, Duke of Clarence; William, Lord Hastings. Lancastrian leaders (left to right) John Beaufort; Edmund Beaufort, Duke of Somerset; Sir John Langstrother, Prior of St Johns; Prince Edward of Lancaster with his sword-bearer John Gower; Sir John Fortescue; John, Lord Wenlock; John Courtenay, Earl of Devonshire. **Left:** Death of the Lancastrian heir, Prince Edward. The black bull standard is that of the Duke of Clarence (on horse), Edward's torn banner can be seen on the ground. On the ground is his sword-bearer, John Gower. **Foot of page:** Battle seen from the Yorkist positions; note the use of small bombards in front of the main battle line.

final layer of paste was still wet, a generous covering of sand was applied to form the basic ground texture. When dry, this could then either be sprayed with green paint for areas of grass, or left exposed for earth. An idea of the lie of the land in 1471 has been preserved in a description of the Battle by a contemporary chronicler, who records that the Lancastrians were positioned 'in a close, even at the town's end . . . afore them and on every hand . . . foul lanes and deep dikes, and many hedges, with hills and valleys . . . a right evil place to approach'. The few roads and tracks which then existed were therefore marked and provided with the 'deep dikes' or ditches. For the hedges and bushes, strips of bathroom loofah suitably dyed and painted, made a realistic representation. This material also provided the 'thatch' for the roof on the model of Gupshill Manor, which was then probably only a farmhouse, made from card and paper; the building on the model was inspired by its present 'reconstructed' state. The trees were simulated by covering small twigs with fibres from shredded nylon pot-scoopers, afterwards sprayed various shades of green.

To obtain the most realistic appearance of the armies it was

apparent that a certain amount of conversion would be necessary in order to avoid the serried ranks of soldiers lined up stiffly in the same position. With over 2,000 figures being used, the simplest and speediest method adopted for the majority of soldiers was to neatly cut the figure through at the waist, vary the pose, and join together again with UHU cement. Alternatively, the body or legs could be exchanged with those of another figure, thus providing innumerable variations. For the more detailed conversions of the leaders and other important knights, this technique was carried even further, with the substitution of heads, arms and limbs, as well as shields, swords and other weapons, to obtain the individual figures seen in the illustrations. In this way, with the addition of material collected from plastic sprue, it was possible to compose figures of heralds, drummers and trumpeters for the retinue of both armies. A number of the horses also underwent similar operations, in particular the falling and dying animals to the forefront of the cavalry ambush. In order to dispense with the bases provided for the horses, it was necessary to

Continued on page 446



**Left:** A panoramic view of the model showing the Yorkist cavalry attack in the background. **Below:** The Yorkist centre with King Edward IV under the Royal Standard (see opposite page for detailed view of the various standards). Note also the accurate heraldic emblems on the various knights' surcoats, a difficult thing to portray reasonably in this small scale.





# The 17 pdr Anti-tank Gun

A MODEL IN 1:76  
SCALE FOR THE  
CRUSADER TRACTOR

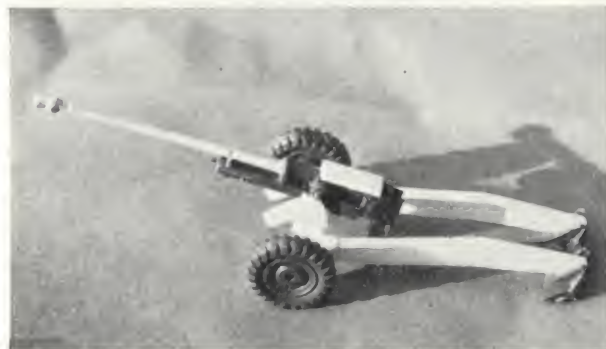
By T. J. Gander

THE 17 pounder anti-tank gun first entered service in North Africa during March 1943. It arrived just in time to take on the Tiger tanks recently arrived to back up the German forces holding Tunisia. The 17 pounder's muzzle velocity of 3,950 feet per second and the shell weight, enabled the hard pressed Royal Artillery gunners to tackle Tigers with a high degree of success, as the only weapon available to them up till then was the 6 pounder which could not penetrate the Tiger's frontal armour. The 17 pounder was given the nickname 'Pheasant' and remained in service for many years after the war until it was replaced by the 105 mm recoilless guns in service today. It was a relatively large gun that weighed nearly three tons, and required up to eight men to manhandle it in the field. Calibre was 76.2 mm and it could fire a wide range of shells including HE which enabled it to take a small part in the massive offensive barrages of the 1944-45 NW Europe campaign.

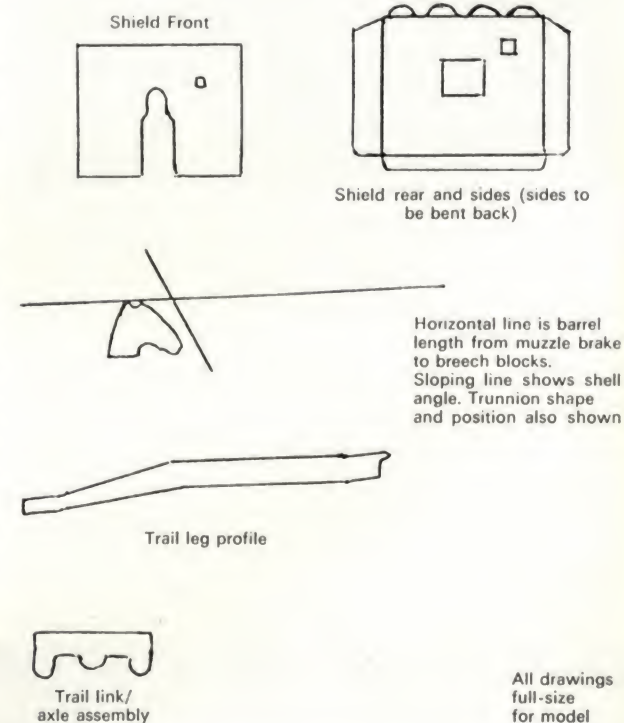
A model of the 17 pounder makes the natural accompaniment for the Crusader Gun Tractor described in the March 1972 issue of *Airfix Magazine*. The source material for the model came from examination of a 17 pounder in the Imperial War Museum and also from a 1:76 drawing in a back number of *Tankette*, the magazine of the MAFVA. If you don't already belong to this organisation I thoroughly recommend that you do so, as *Tankette* contains much material and drawings not available elsewhere and the Association also provides an information service. A SAE to G. Williams, 15 Berwick Avenue, Heaton Mersey, Stockport, Cheshire, SK4 3AA, will provide further details.

To make the model I have had to dig deep into the spares box. Every plastic modeller who has carried out even simple conversions will soon find that the bits left over from kits soon accumulate and many unlikely parts end up in other conversions. The rule is throw nothing away! Add likely looking items such as old tooth brush handles and used ball-point pen barrels and before long your spares box will enable you

Below: View of model awaiting gun-shield and towing eyes. Parts in white are made from plastic card. All other parts are from the scrap box.  
Below right: Completed model with Crusader Gun Tractor described last month.



Above: A battery of 17 pdrs behind M3 Half-tracks on the move in Italy towards the Gothic Line. Note the camouflage covers on the gun-shields and the various items of equipment attached to the nearest gun.



AIRFIX magazine



to tackle models such as the one described here. However the ingenuity of each individual will doubtless overcome any parts shortages that may arise. This model cost me nothing in kit costs as all the parts used were left over from other conversions, or made from small bits of scrap plastic card.

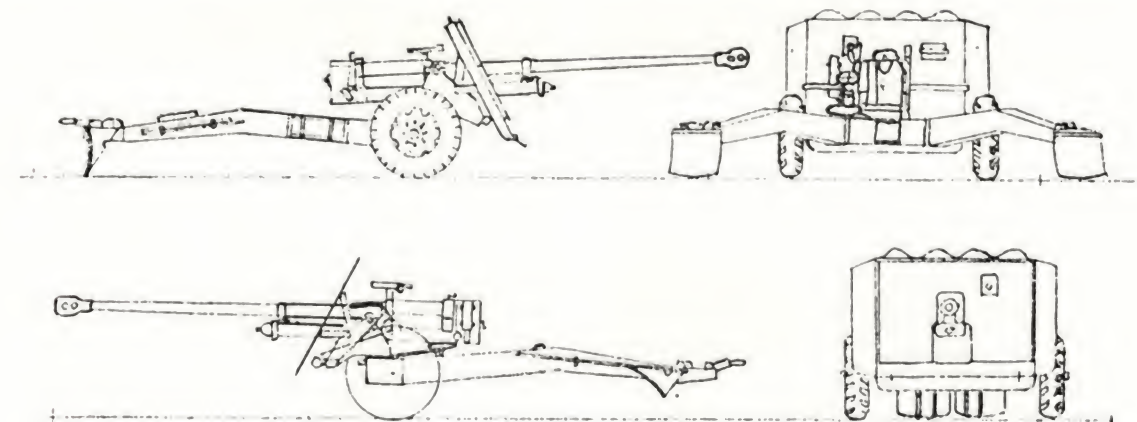
First part to tackle was the barrel and recoil assembly. A 25 pounder barrel was cut back to the ring over the barrel (see photo) and a 38 mm length of Panther barrel with its muzzle brake sanded down to a smoother profile glued in its place. The 25 pounder breech block was enlarged so that its bottom was flush with the bottom of the recoil mechanism. I used an old Minitank part for this but scrap plastic could be used—note however that the breech block was of the falling block variety. Add a 8x3 mm rectangle of thick card with rounded off sides just forward of the breech block to simulate what was probably a barrel counter weight, and the barrel assembly is finished except for detailing. In such a small scale this could



Above left and top: Close-up of the 17 pdr gun on show at the Imperial War Museum showing barrel recoil assembly, breech-block, sighting mechanism and shaped gun-shield.

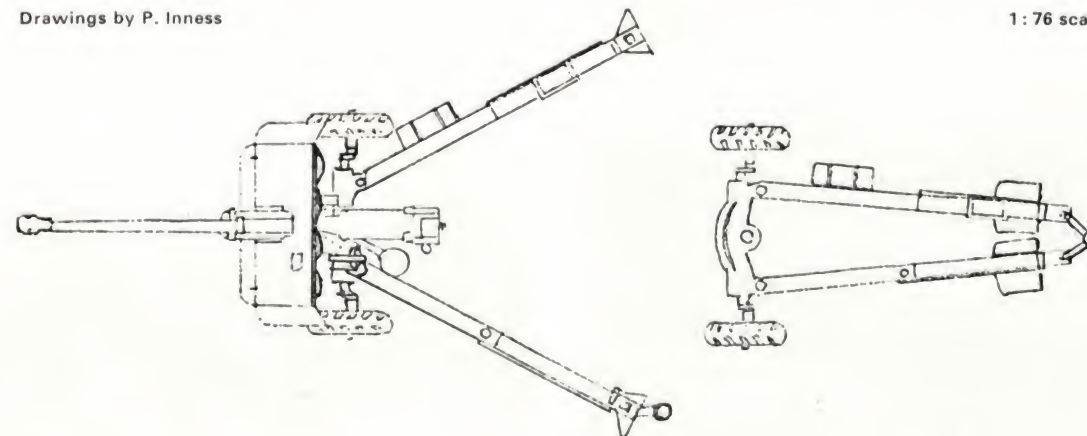
be difficult so I limited this to a plastic rod breech lever on the right of the block and a small piece of Microstrip to simulate its housing.

Next came the carriage. This was almost entirely scratch built with the two trail legs made up from laminated card.



Drawings by P. Inness

1:76 scale





Each card layer was cut using the template shown in the drawing and then held together with layers of tube cement until a thickness of 2mm was reached. The parts were left to dry and the excess cement then sanded down. At this stage it is necessary to determine in which position you want the legs to be. My model was made for towing behind the Gun Tractor and so the legs are folded together. In action they would be splayed apart at an angle of 60 degrees and with the trail spades (the next part) folded down. For towing, the trail spades were folded up and over the legs as shown in the photograph—I used the spades from the 5.5 inch gun kit filed to shape, but they could be manufactured from scrap. The trail link and axle mount was cut from thick card using the drawn template and the trails cemented under it with 14 mm lengths of Microstrip under, and in front of, the trail legs for rigidity. The trail spades were glued together and the trail eye made from scrap plastic, though 5 amp fuse wire would probably be better. Next the trunnions were cut from thin plastic card and cemented onto the axle mount with a 5 mm wide strip of card between them helping to keep them vertical. The gun was cemented on to the trunnion tops with the muzzle canted upwards as the model was intended for towing. The wheels came from the 25 pounder Quad. They are not strictly accurate but don't look too bad. Fixing to the carriage was done by using the ends of the 6 pounder axle cut off and facing forwards, as on the 6 pounder mounting.

Using the drawings shown, add the shield. Note that this was made up of two layers of thin armour. The spacing effect can be simulated by spacing the two card shields with thin Microstrip. Add the sloping sides and the bottom flap, and the model is finished apart from detailing. The outline-breaking wavy line at the shield top was made from 5 amp fuse wire as were the odd brackets and racks on the right hand trail leg.

**Below top to bottom:** Completed model with shield attached awaiting painting. Detail view of the trail spades and towing eyes.



**Above:** Another view of the half completed model clearly showing the trunnion and recoil detail. Compare with the actual gun shown on previous page.

Shield stays from the shield side flaps to the trunnions were from Microstrip again, and the sighting telescope from plastic rod. Plastic rod was also used for the rod fixed to the left trail leg. The seat was from the 25 pounder, and sighting mechanism from the 6 pounder.

The model was painted olive green with dark earth liberally applied to the lower surfaces to simulate mud, and the breech block finished in gunmetal. As finished the gun is as it would have been when towed out of action in a hurry. At all other times when travelling the breech, muzzle, and sighting mechanism would have been carefully protected by canvas covers which could be made from thin tissue paper. I have not included any figures in my model but details of uniforms for anyone who wishes to add them are given below.

If you do not wish to use the Crusader Gun Tractor as a towing vehicle, some M3 half trucks were used for the purpose in Sicily and Italy. Another short cut for this model is the 17 pounder Mk 11. This was the 17 pounder gun mounted direct on to the 25 pounder carriage as a stop gap when 17 pounder carriages were in short supply. These actually saw service before the Mark 1 as they went into action at the end of 1942.

### Uniform and Crew

**E**XAMINATION of contemporary photographs reveals a wide variety of clothing worn in the field by gun crews. The basis of these is the khaki battledress blouse and trousers. The top button of the blouse was usually left undone. In moderately cold weather, leather jerkins were worn over battledress, with khaki beret on the head. As the weather grew colder, a khaki balaclava helmet was added under the beret; colder still, greatcoats (standard khaki issue) were worn. Normal footwear was the metal-studded ankle boot. Snow smocks and trousers were worn in the Ardennes in 1944-45. Few of these crews seemed to wear steel helmets. The general impression was one of personal comfort almost to the point of scruffiness. Regimental shoulder titles and divisional emblems were not always worn. For a miniature 17 pounder gun crew the figures from the Airfix 25 pounder kit can be used. Other useful figures are the RAF men supplied in the Bloodhound kit. Yet another useful source of battledress figures in 1:76 scale is the Merit 'Army Personnel' set, though this is hard to find these days. Finally, there are one or two useful figures in the Airfix 'Civilians' set, in particular a policeman and a man in a duffle coat. With heads changed, or modified to include berets, two more useful British soldier figures result.

**Below:** 17 pdr gun with wavy camouflage used to break up the outline of the barrel. For those wishing to model a gun crew this picture should be particularly useful as it shows gunners dressed as described here.



AIRFIX magazine



## VOUGHT KINGFISHER

**Alan W. Hall describes this famous floatplane and gives suggestions for colour schemes and simple conversions**

**I**HAVE always had a soft spot for the Kingfisher. It was an attractive little aircraft which first caught my attention in the days of balsa wood kits. I well remember making a model of it in 1943 which turned out to be one of the best in my then, small collection. My wartime efforts are now, perhaps best forgotten but I still keep my liking for the Kingfisher and was therefore delighted when Airfix produced their model some years ago.

There are only a few conversions that can be made to the model as Airfix have provided parts for the major change, that of a landplane version. On the other hand there is the prototype which can be modelled and the several minor modifications that appeared from time to time during the aircraft's service. Colour scheme variations are extremely interesting and can give a number of variations, all of which are reasonably easy to produce.

The Kingfisher saw service in large numbers in all parts of the Pacific. A few entered Royal Navy service in home waters first appearing in 1942. A total of 100 were provided under Lease-Lend agreements and were used for operational service on armed merchant cruisers and in a training role in the West Indies. The first unit to have the Kingfisher as its equipment was No 703 Squadron FAA.

Vought built over 1,500 OS2Us most of which were con-

The rebuilt OS2U Kingfisher that has recently been completed by Vought Aeronautics veteran employees. The aircraft crashed during the war on an island off the west Canadian coast. It is now preserved on board the USS North Carolina.



This top view of a Kingfisher graphically illustrates the weathered appearance of many of these aircraft after a short period in service. The position of the overwing stars of the national insignia are also standard for aircraft of this type.

structed as floatplanes. They served with the US Navy as reconnaissance aircraft doubling as air-sea rescue machines. One Kingfisher named 'The Bug' rescued the famous Captain Eddie Rickenbacker and his crew after they had been shot down in the South Pacific. Due to the number of extra bodies on board the aircraft could not take off and taxied across forty miles of rough sea to safety. Kingfishers were also used for offensive operations and they were employed in dive bombing attacks on Japanese installations in the Aleutians each carrying 50 per cent in excess of their normal bomb load.

The Royal Australian Air Force used 18 Kingfishers. These were part of an order being delivered to the Dutch Air Force in Sumatra at the time of the Japanese invasion. Eventually the aircraft were off-loaded from refugee cargo ships at Rathmines, went to No. 1 Aircraft Depot, and from 1942 onward served with No 107 Squadron RAAF. The Squadron used the codes 'JE' on their aircraft and all serials began with A48.

Markings and unit details have been difficult to establish during the research for this article. Most Kingfishers in the US Navy service did not have codes or display any unit designation. Individual aircraft letters or numbers were used (mostly the latter) and therefore the chance of tracing the aircraft through historical references is almost impossible. Many Kingfishers were assigned to cruisers or battleships of the US Fleet and although a few of these did have the name of the ship painted in small letters on the rear fuselage this was by no means common practice.

Apart from pre-war and prototype aircraft, colour schemes for the Kingfisher did not vary a great deal during the war. US Navy aircraft were painted non-specular blue grey on the upper surfaces and non-specular light grey underneath. Seven horizontal red stripes on a white ground were seen on the rudders of aircraft in the 1942 period but these were quickly either painted out or omitted. The US star also lost its red dot centre to prevent confusion with the Japanese 'meatball' at a distance. A study of photographs may indicate that some aircraft were painted matt insignia white on the undersides at a later stage during the war but the lack of colour reference could mean that this was merely a much faded and operationally battered light grey. Codes were either black or white and propellers were left natural metal on the forward side and painted matt black on the rear. Blade tips were painted red, orange yellow, and blue from the tip downwards.

It is difficult to say if any of the 100 Royal Navy aircraft were camouflaged in the same way as other Lease-Lend aircraft. From available evidence it would appear that they remained in their blue grey and light grey scheme following delivery but here again only black and white photographs are available for study and this colour scheme may have been altered to Sea Grey Medium for the upper surfaces whilst the undersides remained light grey. The study of photographs without colour reference for confirmation can often be misleading so unless a reader can produce definite colour reference schemes I am sticking to my assumption that this was the standard scheme for Royal Navy aircraft.

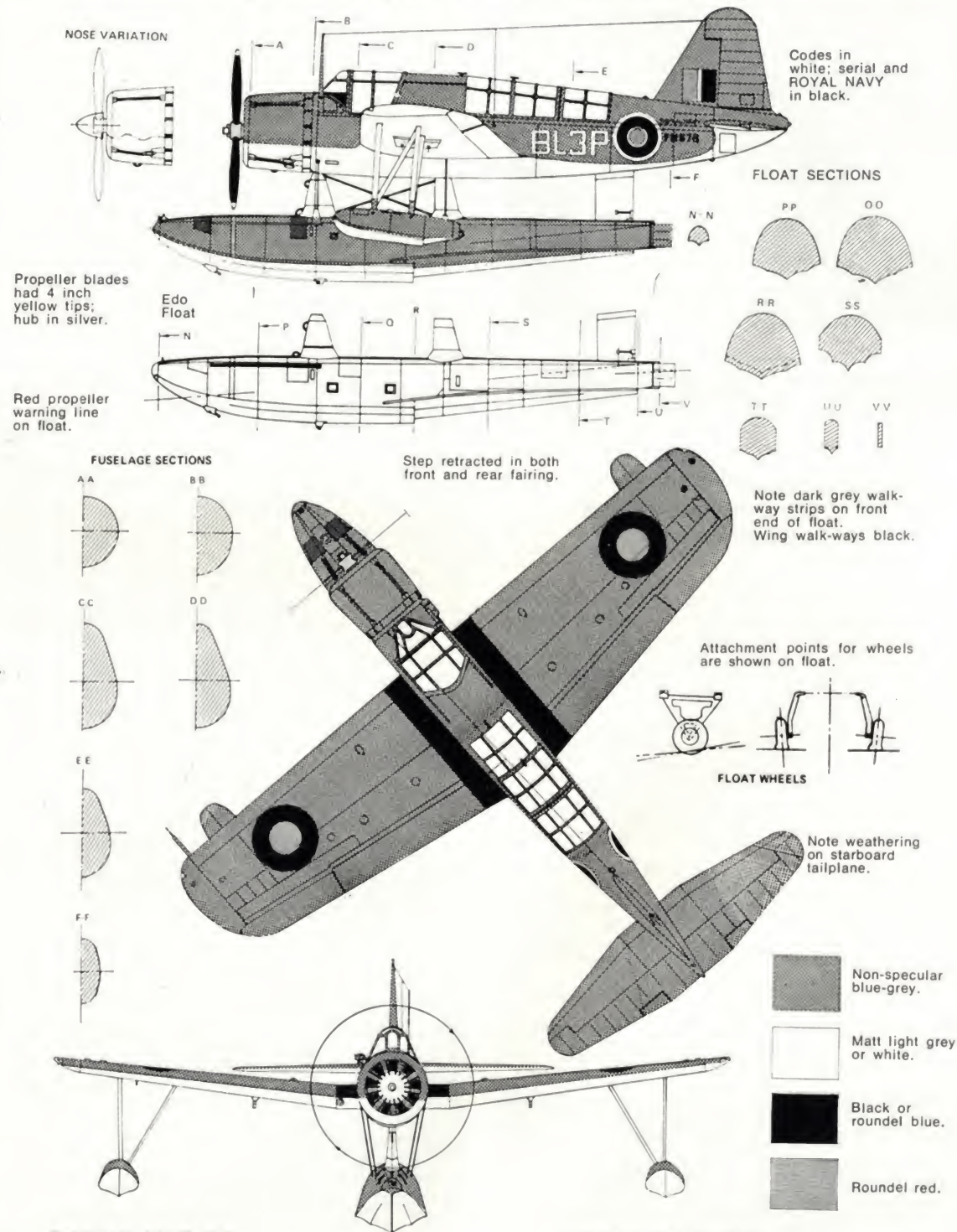
Few Royal Navy aircraft were coded. The Imperial War  
Continued on page 425

Based at Cape May, this OS2U-2 has a pre-war overall silver scheme with red bands round the rear fuselage and engine cowling. The Serial No 2190 appears on the fin.





# Vought OS2U-3 Kingfisher I, FN678, unit unknown, FAA, 1943



## Vought Kingfisher—continued

Museum photograph with this article is typical of all other pictures I have seen apart from that taken by Charles Brown and published in Thetford's *British Naval Aircraft since 1912*. Here the codes BL3P appear on Kingfisher FN678. Other photographs seen showing aircraft of No 703 Sqn serving on board HMAMC *Cicilia* were without codes. These pictures were taken in December 1943 and include aircraft serialised FN709, '687 and '728.

The aircraft employed by No 107 RAAF on the other hand were camouflaged probably in Dark Green and Dark Sea Grey. Here again only three photographs were available for inspection and it appears evident that the camouflage followed no set pattern. The aircraft appearing in the side view drawings, A48-9, differs from others available. Undersides were light grey, codes in white and serials black.

### Conversions

Changes in appearance between the various Kingfishers were few. The main differences were in the prototype aircraft which had an entirely different shape around the forepart of the rear canopy. In the early tests the aircraft did not have the rearmost of the three central pylons connecting the float to the fuselage but this was added after only a few taxi trials.

Certain OS2U-3s in US Navy service later in the war were given spinners on the propeller and many of the first aircraft

This picture of an OS2U-3 Kingfisher in No 107 Sqn RAAF markings gives an indication of the demarcation lines between the camouflage areas. Serialised A48-9 the aircraft was one of 18 used by the squadron after they had been transferred from Sumatra on refugee ships.



'The Bug'. This Kingfisher is distinguished by being the one to rescue Capt Eddie Rickenbacker in October 1942. Previously the aircraft had served at Pearl Harbour on the battleship USS *Pennsylvania*.



**Top:** OS2U-2 on the catapult of the USS *North Carolina*. Note the unusual light grey overall colour scheme which confirms that the picture was taken in May 1941, before the United States entered the war. Details from the catapult on the port side of the ship can be compared with that on the starboard for use in making a diorama. The ship carried three Kingfishers serialised 2288, 3073 and 3074. **Above:** Close view of Kingfishers being placed on battleship catapults.

in service had the Vought built float. This was changed retrospectively for one built by the Edo company. The drawing of the prototype shows the original style whereas all other drawings are equipped with the Edo variation.

One of the most interesting and decorative conversion ideas that can be applied to the Kingfisher is probably a diorama presentation where the aircraft can be shown mounted on one of the catapults found on naval vessels operating in the Pacific. My photograph shows a typical example of a Kingfisher on the USS *North Carolina*. The various aspects of the equipment are shown so that it would not be too difficult a task to build one or both of these catapults from sheet Plastikard using various parts from other kits to achieve the end result. Parts of the old Airfix railway tufftable kit (no longer made) could be used, for example, and parts of the girder bridge could provide the basic framework. Scale dimensions can be worked out by using the height of the men working on the catapults as roughly 5 ft 6 inches high and dividing this into the length and width of the equipment.

### Royal Navy Kingfisher

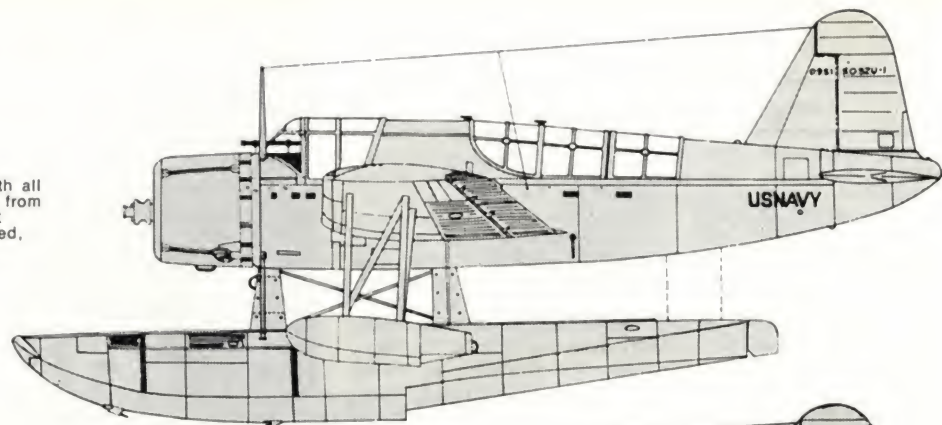
The Royal Navy's requirement for the OS2U-3 was limited to the re-equipment of certain light cruiser and Armed Merchant Cruiser Catapult Flights. The ships concerned had a Light Series catapult, capable of launching aircraft with an all-up weight of less than 5,500 lb; they were thus unable to carry the Supermarine

Continued on page 427



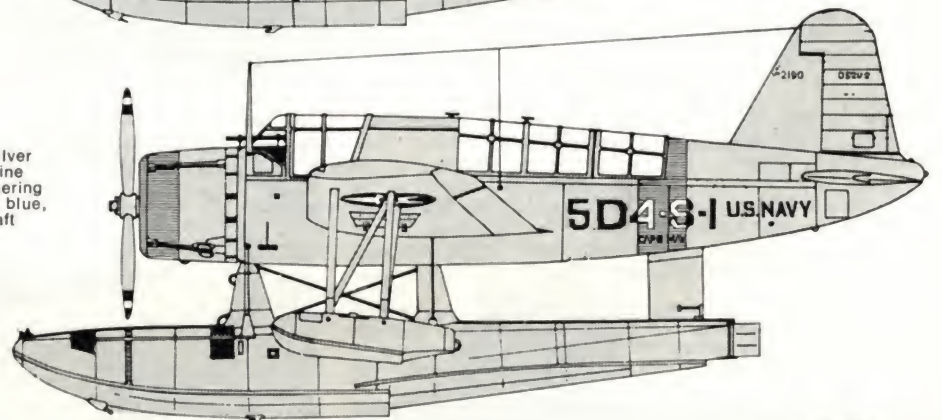
#### XOS2U-1, Bu No 0951

Prototype aircraft silver overall with all lettering in black. Note variations from production version in rear cockpit and floats. Rear strut, shown dotted, was added after early test flight.



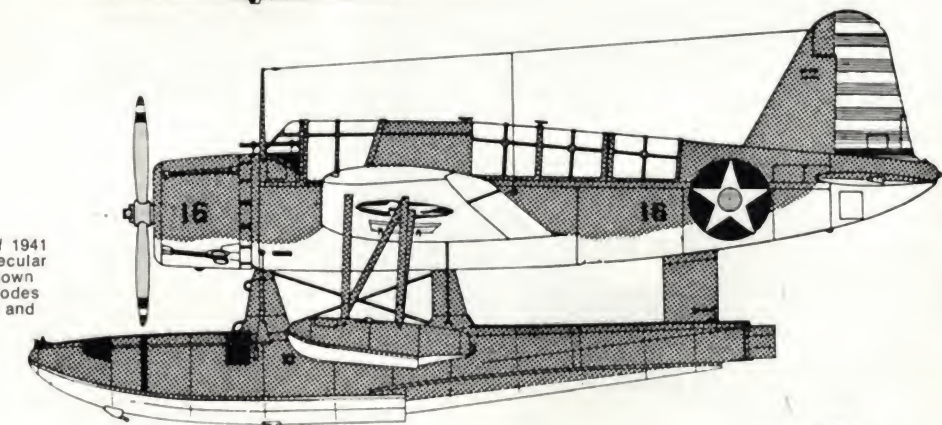
#### OS2U-2 Kingfisher, Bu No 2190

Pre-war colour scheme shown; silver overall with red bands round engine nacelle and rear fuselage. All lettering in black and white. Propeller tips blue, yellow, red from hub to tip. Aircraft from Cape May.



#### OS2U-2 Kingfisher

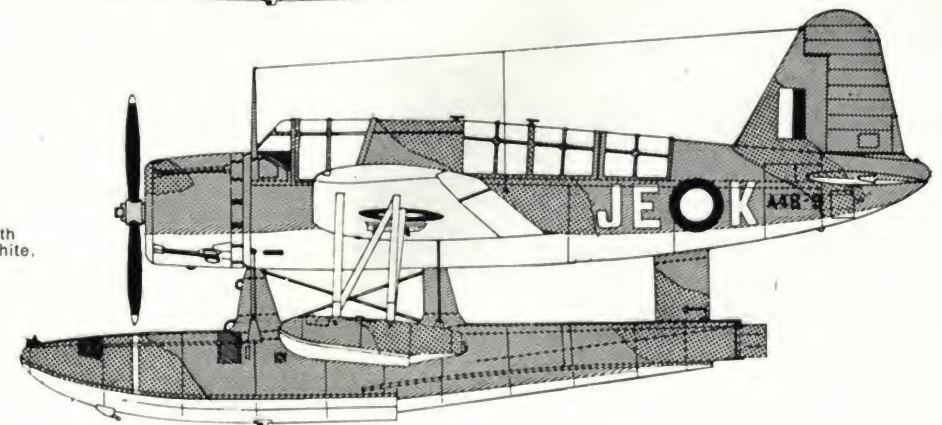
Typical US Navy colour scheme of 1941 period. All upper surfaces non-specular blue-grey. All under surfaces (shown white), non-specular light grey. Codes and serials black, tail stripes red and white. Unit unknown.



#### Drawings by Alan W. Hall

#### OS2U-3 Kingfisher A48-9

No 107 Sqn RAAF, 1942. Dark green and dark sea grey with light grey undersides. Codes in white, serials in black.



#### Vought Kingfisher—continued

Walrus, the principal catapult aircraft with the British Fleet, and had been equipped with the under-powered and somewhat fragile Fairey Seafox floatplane. As the British aircraft industry had no Seafox replacement under development, two US Navy types were requested under Lend-Lease—the Curtiss SO3C Seamew and the Vought OS2U. The first named was a complete failure as a shipboard aircraft as far as the RN was concerned, and in early 1942 it was decided that ships retaining Light Series catapults would be equipped with Kingfishers.

The first batch of Kingfishers was ferried to the United Kingdom aboard the carrier *Furious*, and in mid-May 1942, 703 Squadron was formed at Lee-on-Solent to provide a headquarters unit for the Kingfisher Flights, the first being 703 *Fidelity* Flight, which worked up at Lee and then on the Tay at Dundee, with one machine. *Ranpura* Flight was formed on June 1, 1942, with two Kingfishers, but by the time that it reached Dundee two months later, the Flight had been allocated to *Cilicia* and had been re-designated accordingly. *Corfu* and *Canton* Flights formed at Lee on August 15, 1942, each with a single aircraft, increasing to two during the autumn.

All four Flights were to embark in auxiliaries, HMS *Fidelity* was a 'Special Service Vessel', used for a variety of Special Operations, but the other three ships were all Armed Merchant Cruisers—ex-P & O liners—used for ocean escort duties in the South Atlantic and the Indian Ocean. Not until January 1943 did the first Flights form, for embarkation in the fast light cruisers *Emerald* and *Enterprise*. At the same time, two spare AMC Flights were formed, one at Palisadoes, Jamaica, and the other at Wingfield, Capetown, each with a single Kingfisher.

*Fidelity* Flight embarked in October 1942 and worked-up with the ship. In December, *Fidelity* joined a convoy on passage to Freetown and on 28th was instructed to fly her aircraft on a dusk search for the U-boats which had already sunk a number of ships from the convoy. She had no catapult, and in the water take-off from a rough sea the Kingfisher crashed, both aircrew being rescued. *Fidelity* herself was sunk off the Azores three days later.

The history of the 703 Squadron Flights in the Armed Merchant Cruisers was somewhat happier. *Cilicia*, *Corfu* and *Canton* were refitted during the summer and autumn of 1942, a US Navy-pattern light catapult being installed in each. *Canton*, which had previously been equipped with a British catapult and a Seafox, and *Cilicia* commenced catapult trials in November 1942, and became operational early in 1943. *Cilicia* served in the South Atlantic from January 6, 1943, until January 4, 1944, operating from Freetown on convoy escort and ocean search duties. *Canton* joined her in early February 1943, but left at the end of March, which time *Corfu* was also based at Freetown.

The two ships in the South Atlantic used their aircraft exten-

These two pictures of a Kingfisher in Royal Navy markings were probably taken before the aircraft was shipped to the UK. Note that the underwing roundels were of the 'B' type.



Royal Navy ground crew guide a Kingfisher down the ramp and into the water. The aircraft's serial is FN899 and apart from the standard camouflage scheme it has a matt black anti-dazzle panel in front of the cockpit (Imperial War Museum).

sively for dawn and late afternoon clearance searches, often operating in surprisingly bad weather conditions. *Corfu* Flight flew 142 sorties in ten months and suffered no damage whatsoever to her Kingfishers, in spite of the fact that on only two occasions was the sea calm enough to dispense with a 'slick' from the ship. *Cilicia* Flight spent even more time at sea, her aircraft flying nearly 200 sorties in 11 months. Towards the end of 1943, both Flights were increased to three aircraft, and during the first fortnight of 1944 the two ships operated together as they returned to the United Kingdom, flying searches for blockade runners. The Kingfishers never sighted an enemy warship or auxiliary, but the negative value of their patrols was important: at least the Allies knew where the enemy wasn't.

*Canton* arrived in the Indian Ocean in April 1943, and spent the next 11 months escorting troop convoys between Durban, Bombay, Colombo, Aden and Mombasa. The Royal Navy had no aircraft carrier to spare for the Eastern Fleet at this time, and from July until September 1943, the entire air strength at sea in the Indian Ocean amounted to just 12 Walruses aboard a seaplane carrier and two cruisers, and the two Kingfishers aboard *Canton*, joined, from mid-August, by *Emerald* with her one Kingfisher. The aircraft were less frequently used in the Indian Ocean than in the Atlantic, but *Canton's* two aircraft flew some 120 sorties during the 13 months she spent away from the United Kingdom.

*Emerald* remained with the Eastern Fleet after *Canton's* departure in early February. Her sister-ship *Enterprise* was intended to join her in January 1944, but it was decided that she should be retained in European waters. As catapult aircraft were being phased out of the Fleet, *Enterprise* Flight did not join the ship and disbanded at Dundee in mid-January 1944, after a year ashore. The return of *Emerald* at the end of April 1944 marked the demise of the Kingfisher's sea service with the Royal Navy and the disbanding of 703 Squadron.

The needs of 703 Squadron, for embarked, training, and reserve purposes, accounted for up to 40 out of the 100 aircraft delivered. Others were employed for observer training duties at Piarcio, Trinidad, where 749 Squadron was partly equipped with Kingfishers from late 1942 until the spring of 1945. In South Africa, a Fleet Requirements Squadron, 726, had two Kingfishers on strength from September 1943 until early 1945, based at Durban for target-towing, radar calibration, communications, and miscellaneous tasks. None appear to have remained in service for very long after VE-Day.

That the Kingfisher saw so little embarked deployment was no fault of its own. The Royal Navy already possessed an excellent 'sea-boat' in the Walrus, which could stand up to bad weather better than any other small seaplane, and which could carry up to three passengers as well as two crew-men. As most of the cruisers and capital ships were equipped to operate the Walrus up to 1943 (when the shipborne catapult aircraft began to be withdrawn) it was obviously preferable to retain the home-bred type. The Kingfisher was, however, universally preferred to the Seafox which it replaced as a light reconnaissance type. Its good water-handling qualities being praised by all the Flights which used it.

(We are grateful to Art Schoeni of Vought Aeronautics for these detailed notes on Royal Navy Kingfisher operations—A.W.H.)



# AIRFIX NEWCOMERS



## D.H.C.2 Beaver

*This multi-purpose plane – originally designed for use in Canada – has been flown by some twenty air forces. The detailed 72nd scale Airfix kit can be built as either D.H.C.2 or U-6A versions, with wheels, skis or floats. Ideal model for civil conversions. Price 35p*



## Porsche 917

*A highly successful combination of efficient power unit and lightweight streamlined body! The 32nd scale Airfix kit builds into Gulf promoted version, with highly detailed front and rear suspension. Price 25p*



## British Paratroopers

*This action-packed 29-piece set features seven different types of figures – all in full combat uniform – including officer with map case and stengun, radio operator and sniper. Big, 32nd scale means there's plenty of detail in uniforms and weapons. Price 36p*

## H.M.S. Manxman

*This 600th scale kit builds into the high speed minelayer Manxman as she was in World War II. Accurate detail includes pom poms, life rafts, paravanes and searchlights. Price 25p*



**Now 303 kits  
in the Airfix range!**



*Available from all good hobby shops and F.W. Woolworth: ask for the catalogue. There's also news, articles, conversions for modelling enthusiasts every month in Airfix Magazine. 15p from your model shop or newsagent.*





**Above:** View of completed models. Left to right: MG NCO, Maxim PM 1910 in firing position; Maxim in travelling position; DShK 1938 on anti-aircraft mounting; DS 1939 in firing position; crew member with ammunition box. Note the card bases which have angled edges allowing groups and individual figures to be butted together realistically.

## Russian Infantry Weapons of World War II

### Part 1: Heavy Machine Guns By Bob O'Brien

TWO things started me on this little project—first the publication of the Wargames Research Group *Rules for Infantry Action*, and then the excellent *Arms and Armour* Press book by A. J. Barker and J. Walter on *Russian Infantry Weapons of World War 2*.

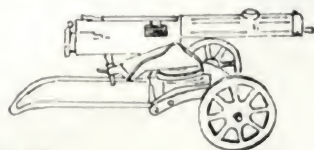
Having had a hand in the production of the rules it seemed only right and proper that I should have a suitable table top force to use, and with the book to hand, Russian it must be.

These articles will not be primarily concerned with conversion of figures, but mainly with construction and adaptation of the various weapons used by the Russian Infantry. First, we deal with heavy and medium machine guns, which are generally distinguished from light machine guns by being belt fed, capable of more sustained fire for longer periods over a greater range, and using some form of tripod, or similar mounting. The light machine gun is normally a drum- or magazine-fed weapon, intended for squad use by one man. There are some exceptions to this, the German MG 34 and later types being belt fed, and capable of use on a tripod with a two or three man crew, or as a one man weapon.

The sketches illustrate the main types of home-produced machine guns, but the Russians did use large quantities of arms from other sources, so that it would not be out of place to introduce British Vickers, American Brownings, or various types of captured (or previously purchased) German types.

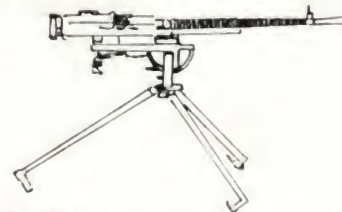
#### Russian Maxim, PM 1910

This was a development of the original Maxim, as was the Vickers. The version shown here was the final type with the water entry port on top of the barrel. It was used all through the war, although steadily replaced by later types.



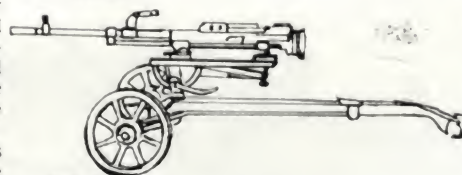
#### DS 1939

Designed by Degtyarev and Shpagin, this was a rifle calibre medium gun based on the heavy DShK 1938. It was superseded by the SG 1943, which was a much more satisfactory gun.



#### SG 1943

Supplanted the DS 1939 in 1943, and continued in service until the end of the war, development continuing afterwards.



#### DShK 1938

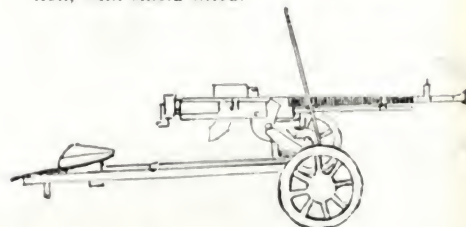
Of 12.7 mm calibre, this was the standard heavy machine gun throughout the war, also appearing as the secondary armament on AFVs.

The first three were all of rifle calibre

(7.62 mm), and could be found mounted on either the older Sokolov mounting, with fixed wheels, or the later Universal mountings, which were true tripods, but still with detachable wheels. The Russians were very keen on wheeled mounts for their heavy infantry weapons, using them on mortars as well as machine guns.

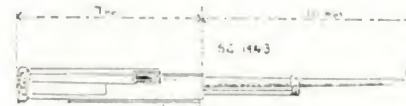
The PM 1910 is shown on the Sokolov mounting, the DS 1939 on the Universal mounting as a tripod with wheels removed, and SG 1943 on the same, showing the tripod legs brought together as a trail with a small seat on the centre leg. A steel shield could be fitted to all types.

The heavy 1938 type also had a form of the Universal mounting, but because of the size and weight of the gun this mounting was not interchangeable with those of the medium types. In the tripod form, the legs extended to provide for anti-aircraft fire, as did the mounting issued with the SG 1943. The sketch shows the 1938 model in the 'low' position, with shield fitted.



#### Modelling the guns

It is best to discard the machine gun provided in the Airfix Russian set. Both it, and its mounting, are far too small. The Maxim type gun was nearly 4 feet long overall which, taking a scale of 4 mm : 1 foot, gives a model length of about 15 mm. However, we have an excellent gun in the Vickers of the 8th Army set. All that is required is to snip off the present water entry port, and substitute the head of a small pin, driven into the top of the barrel as shown. Also, the existing muzzle must be cut off and



**B**  
All drawings and numbers keyed to references in text.

Drawings are not to scale.



**A:** DS and SG gun lengths.

**B:** Universal Mounting.

**C:** Sokolov Mounting.

replaced by a section of pin set low on the front of the casing. The gun is cut off the 'Vickers' mounting leaving the projecting plastic boss below. The Maxim is shown mounted on the Universal, and the Sokolov mounting, in the latter case, being pulled along en route to a fresh position.

All the other guns are built up in a similar way, the basis being a rectangular piece of 60 mm plastic card cut and filed to represent the main body of the gun incorporating the breech mechanism and feed, while the barrel is a suitable sized pin let into the end of the plastic and leaving the head to be filed down to represent the flash hider. A smaller piece of wire is fitted underneath the barrel in the same way for the SG and DShK, while the DS and DShK have very thin wire round the barrel to simulate the cooling fins.

Sketch A shows the construction. The final shaping of the breech is best done after the barrel is firmly fixed, as is attaching of any further detail to the actual gun. All these types had a spade grip and this is best carefully filed from the solid plastic.

#### Mountings

The Universal mounting is straightforward, the legs are made of strips of 20 mm plastic 18 mm long, the two outer legs being glued either side of a 60 mm block of plastic at the front, this block also carries the axle. The centre leg is butted against the rear of the block and the two outer legs are brought against the centre one at the rear and glued. The seat is a small triangular piece of plastic glued on to the centre leg. The wire axle is 15 mm long overall, and the wheels are made from slices of plastic knitting needle 6 to 7 mm diameter. On the model shown here spokes have been represented by eight holes drilled around the face of the wheels, and then elongated by using a piercing saw blade as a fine file. A small circle of 40 mm plastic is cut and glued to the top of the legs to take the gun. Sketch B should show all that is needed.

The Sokolov mounting is more difficult to model, and sketch C shows the method of construction. The basis is a piece of 60 mm plastic card, trimmed to a slight curve and then filed at front and rear to leave projecting lugs, the front pair of which are drilled to take the axle, while the rear pair would have the U-shaped trail attached directly to them. This is impracticable in this scale, so make up the trail from soft wire and file the ends down to a point to be fitted into holes in the main block. The card turntable for the gun mounting completes the job.

For the DS mounting I have cheated, and used the mounting from the 1914 German MG to show this type in the tripod position, as distinct from the 'trail' position, which has a Maxim mounted on it. I say cheated, as the legs of this mounting are not long enough, and those who wish to represent the correct position should use 18 mm legs, but splayed out more than on the mounting shown. This brings the gun up rather higher than normal, and in this position it is capable of AA use, as is shown on the final one to be described, which is the mounting for the heavy DShK seen here in the AA role. Wire is used for the legs, the rear leg being pressed into a block of 60 mm plastic, while the two front legs are made of one piece of wire passed through a hole in the block, and then bent round to give the correct splay. Legs should be 20 to 21 mm long. The gun is mounted as for the others, but a shaped piece of plastic is glued between the mounting and the gun to give the elevation.



**Above:** Another view of the Maxim PM 1910; developed from the original Maxim, it saw service with the Russian forces throughout the war.

#### Figures and finishing

The figures shown can all be recognised as standard from the Airfix Russian Infantry set except for the left-hand figure pulling the Maxim, who is a sub-machine gunner with his gun removed, and the arm cut off and repositioned as shown, using a double-pointed pin to re-attach the arm to the body. The gunner on the heavy MG is the bomb thrower, but a better conversion may suggest itself by experiment. The third member of the moving team is the normal marching rifleman with an ammunition box made of 60 mm plastic carried in his left hand by a thin wire handle pushed into the plastic and running through a hole in the hand.

Ammunition belts are made of thin card, embossed with imitation 'rounds' by pressing between the jaws of a small file, and running from the ammunition box shown in the set to the breech. These belts should be coloured in gun metal for the later type guns, and khaki or grey to represent fabric, for the Maxims. A touch of brass colour is added at the rear of the belts to represent the ends of the rounds. It is possible to make up better looking belts by glueing pin heads on to the belt, leaving the width of a pin between each round. I have done it, but time is sometimes short for preparing models for the next encounter! The left-hand figure in the moving team has a belt hanging around his shoulders; in the position shown it is convenient as it hides any sign of the re-joined arm.

The two guns shown in ground action, and the ammunition carrier, are shown on the standard bases for the Research Group Infantry Action Rules, which define fields of fire and visibility for various weapons in different positions.

Apart from use with the rules, a useful feature of these standard bases is that the thick plastic bases can be cut off, and the figure attached directly to the card base, as shown here. Remember to rough up the surfaces of the feet and other parts of the figure which are to be attached to the base, and use clear Bostick, applying it to both parts to be joined, leaving for a couple of minutes before attaching the figure.

**Right:** Close-up of models described in text. From left to right: PM 1910; DS 1939; DShK 1938 on anti-aircraft mount.



**Right:** J. D. Pickles of Bradford, Yorks, sent us these pictures of models under construction in 1:76 scale for his AFV collection. The excellent workmanship is apparent from the view of the unpainted plastic card bodies. Top left is a completed Stalwart, with an unpainted crane-fitted Stalwart on the right. Wheels for these models come from small die-cast cars. In front can be seen a Humber 1 ton 'Pig' armoured truck and a Hornet as used for the Malkara missile.





# PSL BOOKS FOR MODELLERS

## How To Go Plastic Modelling

By Chris Ellis  
Editor of *Airfix Magazine*  
The second edition of a standard work on plastic modelling. Covers such topics as: basic assembly, detailing, converting, modelling materials, tools, painting, transfers, markings, research, display, maintenance and scenic settings. 168 pp, 8½" x 5½", 80 pictures, 7 pp of scale drawings, case bound. **£1.50 net, plus 13p p & p.**



## How To Go Advanced Plastic Modelling

Edited by Chris Ellis  
Editor of *Airfix Magazine*  
This invaluable book is an essential companion volume to Chris Ellis' popular book for beginners. Will be enjoyed by modellers all over the world. Goes deeply into assembly, construction and conversion of many different types of plastic models. 192 pp, 8½" x 5½", 100 pictures, 68 drawings, case bound. Just reprinted. **£2.00 net, plus 13p p & p.**

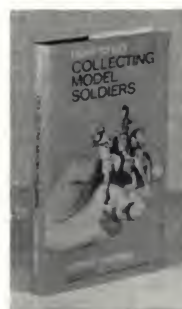
## Fighting Colours RAF Fighter Camouflage and Markings, 1937-1969

By Michael J. F. Bowyer  
The author, a well-known contributor to *Airfix Magazine*, details the development and changes in camouflage and markings of Royal Air Force fighter types from 1937-1969, and lists the serial number allocations of every RAF fighter ever flown in that period. There are 139 individual drawings which depict specific aircraft in typical markings of the period. 192 pp, 8½" x 5½", 157 photographs, case bound. **£1.75 net, plus 13p p & p.**



## How To Go Collecting Model Soldiers

By Henry Harris  
An acknowledged military expert explains how to make the most of your collection. This book covers choice of scales, displaying models, developing 'themes', and conversion ideas, as well as surveying the history of the different arms. Gives advice on how to plan a model army and how to amass the men and materials for a serious collection. More than 70 superb photographs and a chapter on wargames by Donald Featherstone. 200 pp, 8½" x 5½", case bound. **£2.00 net, plus 13p p & p.**



## World Uniforms in Colour

Two superb colour books of interest to all military enthusiasts, modellers and model soldier collectors, describing and illustrating the uniforms, badges and ranks of present-day units with regiment and corps histories. **£1.50 net each, plus 25p each p & p.**  
**Volume 1**  
Features the European Nations, with more than 190 colour illustrations. 12½" x 9½".  
**Volume 2**  
Covers 44 countries in America, Africa, Asia and Oceania, and contains nearly 300 colour illustrations. 12½" x 9½".



Each vol: 96pp, case bound.

## Tanks An Illustrated History of Fighting Vehicles

By Armin Halle  
Illustrated by Carlo Demand  
This magnificent book traces the development of one of the most important weapons ever to appear on the world's battlefields. It starts with the story of the early armoured vehicles and then covers the development of the tank up to the present time. 176 pp, 11½" x 10", 184 illus (73 colour) and 223 diagrams, case bound. **£9.80 net, plus 25p p & p.**



## Guns An Illustrated History of Artillery

Edited by Joseph Jobé  
Traces the history and technology of artillery, from its beginnings in the 14th century to its final evolution in two World Wars. Military experts from four nations contribute to this superbly illustrated book. Also included is an illustrated catalogue of historically important guns and artillery pieces, with technical data. 218 pp, 11½" x 10", 305 illus (24 colour), case bound. **£9.80 net, plus 25p p & p.**



## Classic Ships, Their History and How To Model Them No 1—HMS Victory No 2—Mayflower

By Noel C. L. Hackney  
Both books in this unique series not only have a colourful description of the history of a famous ship, but also contain highly detailed, stage-by-stage advice on how to construct a showpiece model of it, using the Airfix Classic Ship kit as a basis. Published in association with Airfix Products Ltd. 9½" x 7½", illustrated, case bound. **£1.05 net each, plus 13p each p & p.**



## Seven famous books for railway modellers

Patrick Stephens have now completed reprinting all seven titles in the GWR's popular 'Boys of All Ages' series. Originally published in the 1920s and 1930s, they describe and illustrate many aspects of the GWR, its steam locomotives and their history. Each book is written by W. G. Chapman and will make an ideal reference source for railway modellers, both beginners and experts. All seven books measure 7½" x 4½" and are profusely illustrated.



'The 10.30 Limited'  
'Caerphilly Castle'  
'Twixt Rail & Sea'  
The 'King' of Railway Locomotives  
**£1.50 net each, plus 10p each p & p.**

'Cheltenham Flyer'  
Track Topics  
Loco's of 'The Royal Road'  
**£1.60 net each, plus 10p each p & p.**

Coming on March 30, another GWR reprint: **Brunel and After** by Archibald Williams. **£2.00 net, plus 10p p & p.**

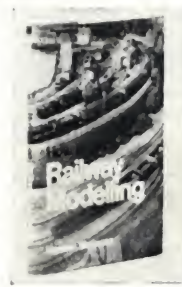


# PSL BOOKS FOR MODELLERS

## How To Go Railway Modelling

By Norman Simmons

The fifth book in the 'How To Go' series covers layout planning and building, electrical wiring, track laying, vehicles, scenery and operation, with numerous illustrations. Written by an expert contributor to *Airfix Magazine*, it includes lists of clubs, magazines, manufacturers, model locomotives and stockists. 216 pp, 8½" x 5½", 111 photos, over 100 drawings, case bound. Published on April 20. **£2.60 net, plus 13p p & p.**



## Airfix Magazine Annual for modellers

Edited by Chris Ellis  
Editor of *Airfix Magazine*

A best-selling collection of features covering all the most popular aspects of plastic modelling. Written mainly by expert *Airfix Magazine* contributors, this instructive book contains 20 interesting, informative articles that will be enjoyed by all keen modellers. Published in association with Airfix Products Ltd. 96 pp, 9½" x 7½", 316 illus, case bound. **£1.25 net, plus 13p p & p.**



## Classic Aircraft, Their History and How To Model Them

No 1—Spitfire  
By Roy Cross and Gerald Scarborough

Covering the Marks I to V, this book begins with the early history of the Spitfire, its design and early development, and then shows how the basic 1:24 scale Airfix kit of the aircraft can be turned into a magnificent museum-quality replica. Published in association with Airfix Products Ltd. 104 pp, 9½" x 7½", 211 illus, case bound. **£1.50 net, plus 13p p & p.**



## British Warships of the Second World War

By Alan Ravan and John Roberts

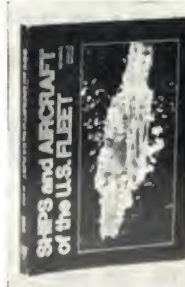
This folio of authentic scale plans is an essential reference source for warship modellers. It includes scale plans—12 in all—of famous warships HMS *Rodney*, *Royal Oak*, *Warspite*, *Renown*, *Repulse*, *Ajax*, *London*, *Manchester*, *Sussex*, *Ariadne*, *Onslow*, and *Lance*. Every plan pulls out to 30 inches. A Conway Maritime Press book. 14½" x 10½", case bound. **£2.80 net, plus 25p p & p.**



## Ships and Aircraft of the US Fleet

Edited by John S. Rowe  
and Samuel L. Morison

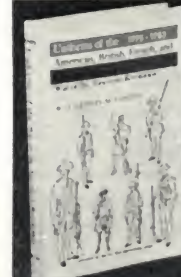
This, the ninth edition of an excellent reference source for ship modellers, has been completely redesigned and revised. Contains classification and characteristics of all craft in the US Navy and Coast Guard as at September 1971. 293 pp, 10" x 7", 427 photos, 19 line drawings, paper bound. A United States Naval Institute Press book. Published on April 10. **£3.80 net, plus 20p p & p.**



## Uniforms of the American, British, French, and German Armies in the War of the American Revolution, 1775-1783

By Lt Charles M. Lefferts  
A WE Inc book

This new edition of a work first published in 1926, now a collectors' item, contains plates and descriptions of the uniforms and short histories of the units illustrated. 304 pp, 9" x 6", 69 illus, case bound. **£3.80 net, plus 25p p & p.**



## US Single Shot Martial Pistols, 1776-1945

By C. W. Sawyer  
A WE Inc book

This new edition of a rare book, out of print for more than 50 years, includes data and illustrations of all significant US single shot martial pistols manufactured. A useful source for gun collectors and military historians. 112 pp, 8" x 5½", 46 line drawings, case bound. **£2.40 net, plus 10p p & p.**



## US Cartridge Co Collection of Firearms

A WE Inc book

Before its auction in the 1920s, this was one of the most famous arms' collections in America, comprising every type of major firearm from the American wars. Each arm is described as to its manufacture, action, period of use, function and markings. 142 pp, 9" x 6", 47 illus, case bound. **£2.80 net, plus 15p p & p.**



Send for free leaflet listing all the WE Inc books.

## How to order

PSL books are published by Patrick Stephens Ltd, 9 Ely Place, London EC1N 6SQ (Tel: 01-405 2297). Use this order coupon to obtain your copies—post it to PSL or hand it to your bookseller or model shop. (Send for free descriptive leaflets if not convinced!) If you prefer not to cut your magazine, order on a piece of notepaper.

To: Patrick Stephens Ltd, 9 Ely Place, London EC1N 6SQ		OR: YOUR BOOKSELLER OR MODEL SHOP	
Please supply me with the following books:		£	p
.....	.....	:	:
.....	.....	:	:
.....	.....	:	:
.....	.....	:	:
.....	.....	:	:
.....	.....	:	:
I enclose my remittance of £..... (including postage and packing)		TOTAL	£
NAME .....			
ADDRESS .....			
(Block caps please) .....		(A4 72)	



# Basic layout planning

BY MICHAEL ANDRESS

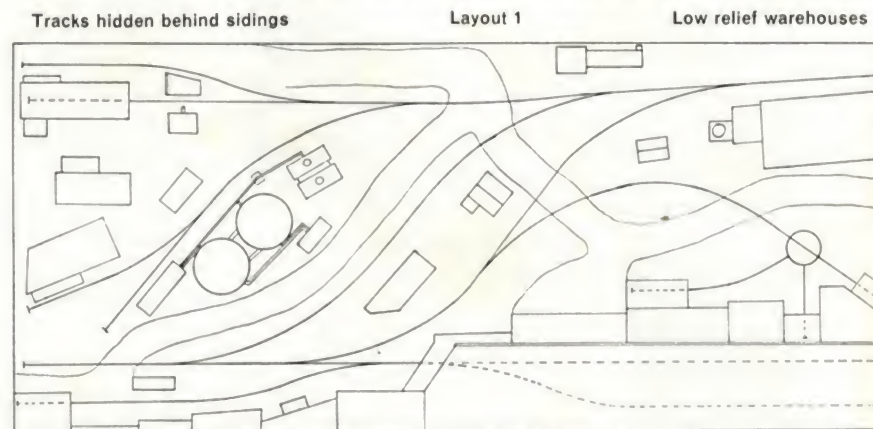
IN the last part of this series I discussed one solution to the problem of fitting a layout into a narrow space, the branch line terminus. This can make a very appealing model and over the years many of these layouts have been built. However, if you want to retain a prototype atmosphere, the operating scope may be rather limited with only a few trains a day on the timetable. An alternative scheme which is well worth some consideration if you would like something a little different is an industrial railway. You will, of course, be rather restricted in the range of locomotives you can use; all the larger types are quite unsuitable, and passenger traffic will be either non-existent or limited to workmen's trains, but the goods traffic can be as varied as you wish.

It is possible, without loss of realism, to pack a great deal of track and numerous structures into even a small space. After all, prototype industrial areas are often cramped with maximum use of the available land, and with many buildings close together; sharp curves and possibly also steep grades are often needed on industrial trackage. Such a model will keep its interest both in construction (lots of super-detailed structures can be fitted in when you get around to building them) and in operation (plenty of scope for tricky shunting problems).

One form of trackplan we can use is the zig-zag or switchback pattern. Layout 1 is an example of this scheme and is supposedly part of the railway system within a large industrial plant, for example a steelworks, shipyard, etc. Alternatively to give even greater variety in the traffic it could be an industrial area with several different concerns (factories, warehouses, oil storage depot, chemical plant, and so on) close to each other. By having one siding serving two or more different industries, shunting becomes even more interesting and complicated. The line at the back passes between two buildings and supposedly joins up with the general railway system to and from which the traffic comes; in fact this line serves a small 'fiddle yard'. Here trains are made up and are then brought



Above: This small industrial layout shown under construction, built by Chris Ellis, is a variation of the idea shown below. It is 5ft x 1ft and is planned so that the lower left and upper right tracks will join up later to adjacent baseboards. Note the diagonally placed loop line. The sidings will eventually all serve industries. Unlike the layout below, this one doesn't have hidden sidings since these are planned for an adjacent board.



out and the vehicles distributed to the various sidings, perhaps according to some prearranged scheme.

A small engine shed with coaling and watering facilities (or oil refuelling if you have diesel locomotives) adds interest without taking up much space. I've placed it at the front of the layout so that this area of railway interest is shown to good advantage. The buildings at the back of the layout concealing the 'fiddle' sidings are modelled in low relief. To give an even greater feeling of depth you could erect a backdrop behind the 'fiddle yard' with painted buildings to be visible over and between the low relief structures.

I have included a feature, mainly for scenic purposes, which although widely used in prototype form is rarely seen as a model, a wagon turntable. This type of small turntable provides access to tracks where there would not be room to fit points nor space for the curve away from the main siding that would be required. They are often used to enable wagons and vans to be moved

Use small locomotives on small layouts. This Rivarossi HO Baltimore and Ohio 'Little Joe' is ideal, only 4 inches long.



into buildings for unloading purposes. Of course, engines cannot use these turntables and the wagons must be moved by manpower, still in use even now in some yards, wire and capstan, horsepower, or by tractor, truck, etc, fitted perhaps with a beam for pushing. The only wagon turntable commercially made is the Peco 009 model, but it would be easy to build one for standard gauge, it can be a non-working model for simplicity if you wish.

If you have more length available this switchback scheme can be stretched out to fit with great advantage in the length of run as for each foot increase in baseboard length the run will be 3 feet longer.

For Layout 2 I have chosen a mining theme in 009 with ore from the mines in the hills being brought down to the valley where it is processed and transferred to the standard gauge for shipping out. As we have the three main sections of our run adjacent and more or less parallel to one another we must separate them as much as possible both actually and visually for the most realistic effect. The narrow baseboard limits much spreading out of the tracks in this direction but we can separate them in height and we should do this as much as is feasible. This will make the gradients fairly steep and you may have to keep your trains short; these are both advantages rather than disadvantages as the steady descent from the mines will give the impression that the line really is going somewhere and the short trains will make the layout look bigger and the scenery more impressive. Hiding parts of the track by

Continued on page 446

AIRFIX magazine

# SAAF Dakotas

Colour schemes and markings

described by

Richard Gardner and Dave Becker



Left: VIP Transport, serial number 6882 of 44 Sqn. Flag on fuselage is pale blue with South African National flag in the upper right canton and a blue/gold SAAF 'castle' in the lower left canton.

THE first of the two wartime SAAF Dakota squadrons, No 28, was formed at Almoza, Cairo, on June 1, 1943, from personnel of 34 and 35 (MR) flights, the unit having eight C-47s by August 1943. The second squadron, No 44, was formed from 43 Sqn on March 12, 1944, also at Cairo, and together flew much of the men and material transported in the North African and Mediterranean theatre of operations. Meanwhile, in the Union, 5 Wing (SAAF) received its first Dakota, 42-23630, to supplement Ju 52s, Ju 86s and Lodestars, and this was ferried from Accra on June 21, 1943, to become G801 in SAAF service (42-23630 was allocated RAF serial FD874 but it is doubtful if this was ever carried).

Both units had detachments scattered throughout these theatres but in June 1944, 28 Sqn was based at Maison Blanche, Algeria, and 44 at Bari in February 1945, with the Balkan Air Force, dropping supplies to partisans and evacuating Yugoslavian casualties. No 44 was disbanded at Bari on December 6, 1945, but 28 Sqn continued and formed an integral part of the shuttle service undertaken by No 5 Wing, SAAF, ferrying troops to the Union until January 1946.

During the World War 2 period and the early post-war years, an overall Olive Drab finish or a Dark Green/Dark Earth finish (both cases with Sky under surfaces) were usual for these aircraft. 'C' type roundels were standard but a few had non-standard fin flashes with equal bars of orange and white and blue. Serials, initially either RAF or USAAF, were later changed to the SAAF system in the batch beginning 6801.

The Dakotas which were supplied under Lease-Lend were settled for after the war and in all about 84 were involved which were of the C-47A and C-47B version, distinguishable externally by their different carburettor air intakes.

No 60 Sqn used a number of Dakotas post-war as photo survey aircraft and these carried that unit's code letters JS in yellow on their Olive Drab and Sky finish (eg. 6859:JS-Y, 6837:JS-X).

The earliest marking change was the addition of underwing serials but soon after, expensive, heavy, and now unnecessary camouflage finishes were removed, leaving the aircraft in bare metal finish. 'A' (and in a few cases 'C') type roundels were



Left: Standard 'castle' of the SAAF, other later versions of this have the springbok's head facing forward with no features, similar to type used in the roundels.

April 1972

standard, with 60 Sqn using yellow codes and 28 using black codes. Examples of 28 Sqn codes were 6835:N-OD, 6856:L-OD and 6843:A-OD (all marked forward of the fuselage roundel).

Between September 22, 1948, and April 25, 1949, 28 Sqn took part in the Berlin Airlift. However, as RAF aircraft were used, details of this operation (already well publicised) fall out of the scope of this article.

Some Dakotas later incorporated 'D' type roundels and one of these (at least) was modified as an ambulance aircraft. Special markings were laid down for this role. This comprised a red cross on a 45 inch diameter white disc to be placed on the rear door 5 inches below the centre line forward of the roundel and in a corresponding position on the other side of the fuselage. In addition a further red cross with arms 45 inches long x 15 inches wide was placed on a 52 inch white disc on the underside of the centre section, a corresponding one being marked on the cabin roof. 6853 was the serial of one of these.

The introduction of the 'springbok' marking followed in the 1950s. Two VIP C-47Bs were named, 6868 being *Rustig* and 6852 *Fleur*. No 6868 was unusual in having the two rearmost windows on the starboard side in close proximity (a number of RAF and USAF VIP C-47s also have this feature).

By this time 60 Sqn no longer existed but in November 1953, 44 Sqn was re-formed as an ACF Dakota squadron.

In 1955, the VIP aircraft of 28 Sqn began to receive white fuselage tops and fine, edged with a Roundel Blue cheat line. At this early stage the white top was a distinctly cream shade, but later, pure white was used. As this new scheme spread to the other squadron aircraft, code letters were discontinued, and anti-glare panels on nose and engine nacelles, formerly grey, were finished in matching blue (an ultramarine shade). Many of the SAAF's Dakotas had by this stage been sold to civilian operators—indeed, all of South African Airways' Dakotas were ex-SAAF.

The two Daks used for overseas flights, 6854 and 6848, had black de-icer boots on all surfaces as well as the legend 'South African Air Force/Suid Afrikaanse Lugmag' on either side of the cabin roof.

A third VIP Dakota was added to the VIP Flight around 1958, a C-47B serialised 6857 with the name *Klein Tierberg*, the same as that of the VIP Ventura which it replaced. Only the inner halves of the engine nacelles of the VIP Dakotas were painted blue.

In February 1956, orders were issued for the new 'castle' marking to be introduced but it was some considerable time before this became apparent. At first the diameter of this remained the same as that of the previously applied roundel, but later this was enlarged.

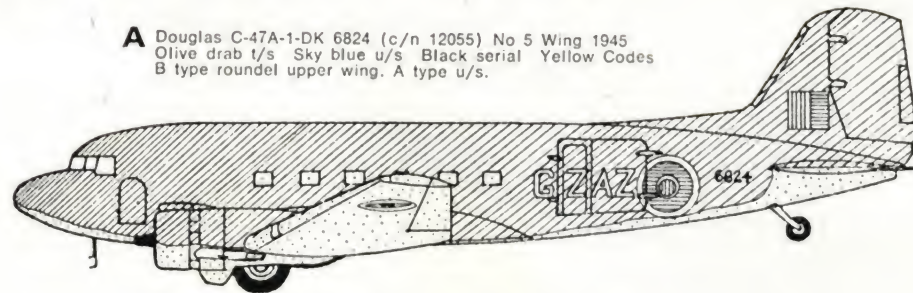
Underwing, the marking diameter was 54 inches, with its centre 124 inches from the inboard extremity of the aileron. Serials were applied in black 48 inch x 30 inch figures in the standard RAF positions, parallel to the trailing edge. The 'last two' of the

Drawings overleaf

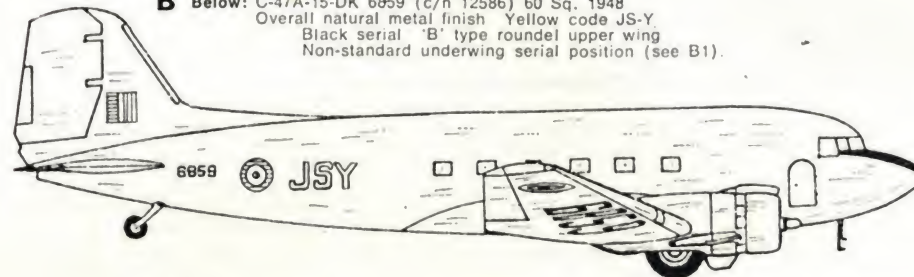
Text continues on page 442



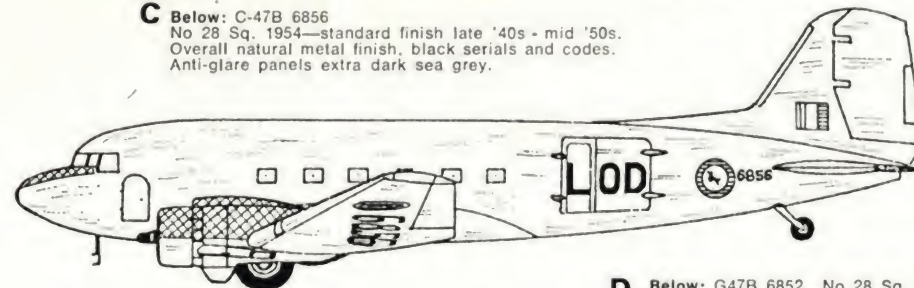
**A** Douglas C-47A-1-DK 6824 (c/n 12055) No 5 Wing 1945  
Olive drab t/s Sky blue u/s Black serial Yellow Codes  
B type roundel upper wing. A type u/s.



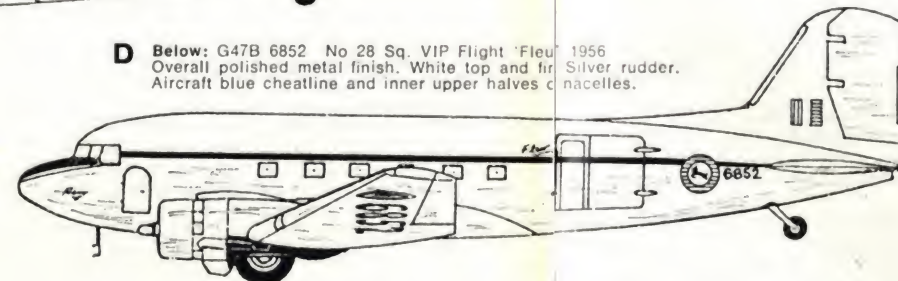
**B** Below: C-47A-15-DK 6859 (c/n 12586) 60 Sq. 1948  
Overall natural metal finish Yellow code JS-Y  
Black serial 'B' type roundel upper wing  
Non-standard underwing serial position (see B1).



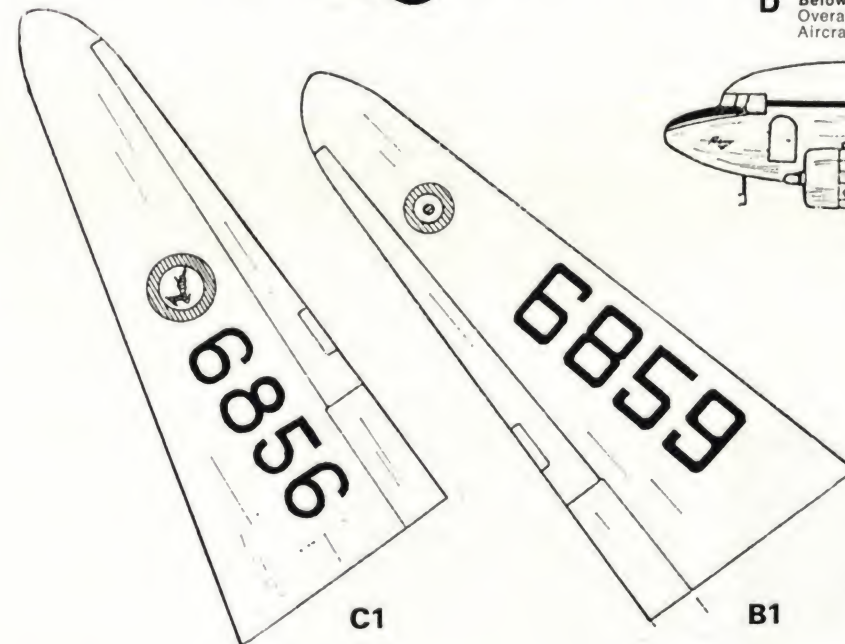
**C** Below: C-47B 6856  
No 28 Sq. 1954—standard finish late '40s - mid '50s.  
Overall natural metal finish, black serials and codes.  
Anti-glare panels extra dark sea grey.



**D** Below: G47B 6852 No 28 Sq. VIP Flight 'Fleur' 1956  
Overall polished metal finish. White top and fin Silver rudder.  
Aircraft blue cheatline and inner upper halves of nacelles.



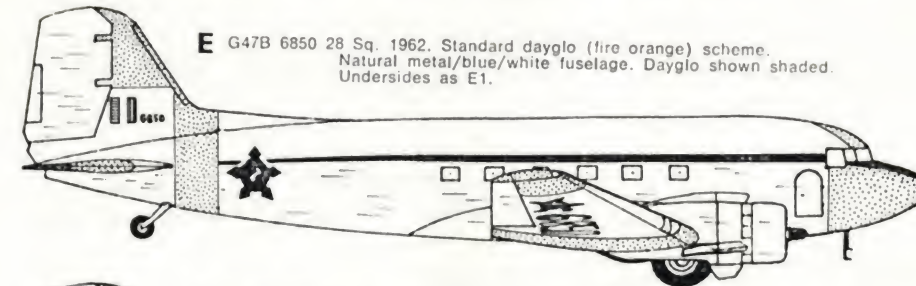
Standard aircraft have whole upper surface of nacelles painted blue  
Under surfaces as in C1. and an overall silver  
painted finish.



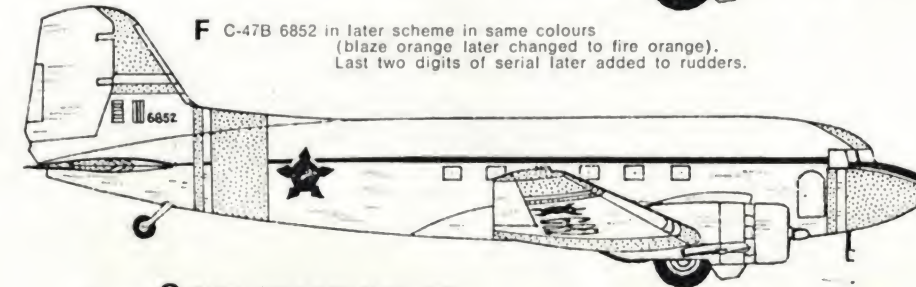
C1

B1

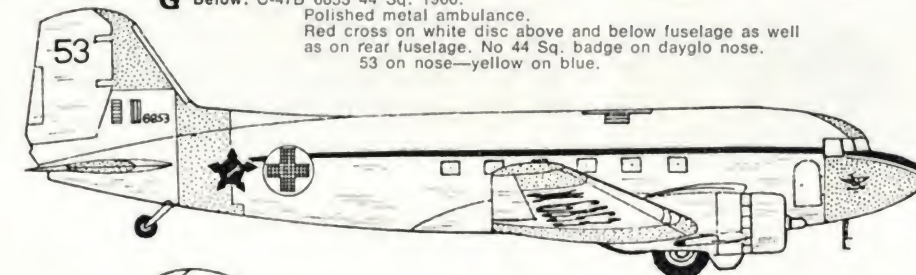
**E** G47B 6850 28 Sq. 1962. Standard dayglo (fire orange) scheme.  
Natural metal/blue/white fuselage. Dayglo shown shaded.  
Undersides as E1.



**F** C-47B 6852 in later scheme in same colours  
(blaze orange later changed to fire orange).  
Last two digits of serial later added to rudders.



**G** Below: C-47B 6853 44 Sq. 1966.  
Polished metal ambulance.  
Red cross on white disc above and below fuselage as well  
as on rear fuselage. No 44 Sq. badge on dayglo nose.  
53 on nose—yellow on blue.



**E1** Standard dayglo scheme  
for transports and  
ambulance aircraft.



**F1** VIP dayglo scheme.



Standard scheme for current 44 Sq. aircraft.  
Orange tips.





# HO 00 Model Miniatures

## Military Tanks and Vehicles

**MINITANKS**

101 U.S. Sherman Tank M4	17p	140 U.S. Recovery Vehicle	20p	182 U.S. M103 Tank	22p
102 German Panther	17p	141 U.S. Artillery Group	15p	183 U.S. 105 mm. Field	14p
103 USSR Stalin III	17p	142 U.S. Open Jeep	12p	184 Mini-Tank Manual	63p
104 U.S. 155 mm. SP M40	17p	M-38A1	12p	185 Pine Tree Assortment	17p
105 German 88 mm. AA	17p	142A U.S. Jeep with Canopy	12p	186/188 German 150 mm.	19p
Gungirille	17p	M-38A1	12p	Field Howitzer	17p
106 German Tank IV/F1	17p	143 U.S. Jeep with Machine	15p	187 U.S. 155 mm. Field	19p
107 German Tank IV/F2	17p	Gun	15p	Howitzer M-1	19p
108 German Tank IV/H	17p	144 Jeep with 75 mm.	15p	189 German Faun Dump	19p
109 German Quad	17p	Anti-Tank Gun	15p	Truck	19p
Wirbelwind	17p	145 Jeep with 106 mm.	15p	190 German Open Faun 10	19p
110 3.7 Selfprop Flak Gun	17p	Anti-Tank Gun	15p	Ton Truck	19p
Eastwind	17p	146 U.S. 2½ Ton Closed	17p	191 U.S. 6 Ton Gun Carrier	19p
111 Selfprop Quad AAA Gun	17p	Wagon M-109	17p	192 5 Ton Truck with	23p
112 German 37 mm. Flak Gun	17p	147 U.S. 2½ Ton Dump Truck	17p	Canopy	23p
113 U.S. Honest John	17p	M-342	17p	193 5 Ton Mobile Crane	23p
Rocket Launcher	33p	148 U.S. Water Tank Truck	17p	194 5 Ton Truck with	19p
114 U.S. La Crosse Missile	24p	M-50	17p	Winch	19p
115 U.S. 2½ Ton Personnel	19p	149/150 Water Tanker and	17p	195 5 Ton Artic. Tanker	30p
Truck	19p	Mess Trailer	17p	196 Pontoon Tractor Trailer	30p
116 U.S. 2½ Ton Cargo	19p	151 Assault Boat and	13p	197 Bridge (Without	14p
Truck	19p	Trailer	13p	Pontoons)	14p
117 U.S. Soldiers in Combat	13p	152/153 U.S. ½ Ton and	17p	198/199 Field Gun 37 mm.	15p
(12)	13p	1½ Ton Trailer and	17p	and ½ Ton Jeep Trailer	15p
118 Combat Rafts	8p	Covers	17p	200 British Chieftain Tank	19p
118A Life Belts	8p	154 U.S. Parade Group	13p	201 French AMX 30 Tank	19p
119 U.S. 8" Howitzer	19p	155 British Centurion Tank	21p	202 U.S. Sherman M4 A4	19p
120 U.S. 155 mm. Long Tom	19p	156 British Conqueror Tank	21p	Tank	19p
121 U.S. Anti Aircraft Gun	23p	157 U.S. Self Propelled Gun	24p	203/204 U.S. M8 Greyhound	15p
120 mm.	23p	M53	24p	and M20	15p
122 German Armoured Car	15p	158 U.S. Self Propelled	24p	205/206 U.S. Tank Destroyer	17p
234/1	15p	Howitzer M55	24p	M10 and Medium Tank	17p
123 German Armoured Car	15p	159 U.S. Weasel Amphibious	15p	M36	19p
234/2	15p	Craft	15p	207 U.S. M41 Walker	19p
124 German Armoured Car	15p	160 Russian T34/76	17p	Bulldog	19p
234/4	15p	161 Russian T34/85	17p	208 U.S. Self Propelled M42	19p
125 Signs and Accessories	12p	162 Russian T44	19p	Gun	19p
(Decals)	12p	163 Russian T54	19p	209 U.S. Personnel Carrier	19p
125A Tactical Signs and Numbers	12p	164 U.S. Supply Trailer	17p	M113	19p
(Self-Adhesive)	12p	165 Articulated Tank	15p	210 U.S. Armoured Carrier	19p
126 German Half Track	17p	Trailer	15p	M106	19p
127 German Half Track	17p	166 U.S. Artic. Stake	15p	211 German Personnel Carrier	15p
37 mm. Gun	17p	Trailer	15p	20 mm. G. HS-30	15p
128 German Half Track Quad	17p	167 U.S. Artic. 2.5T with	24p	212 German Rocket Launcher	15p
A.A.A. Gun	17p	Trailer	24p	JPZ 3-3	15p
129 German Half Track with	17p	168 U.S. Artic. 2.5T Open	24p	213 German 81 mm. Mortar	15p
Light (Infra-Red)	17p	Trailer	24p	Carrier SPZ 52-3	15p
130 German Half Track with	17p	169 U.S. Artic. 2.5T with	24p	214 German Personnel	17p
Sound Detector	17p	Tank	24p	Carrier Armoured	17p
131 German Half Track with	17p	170 German Tiger I Tank	19p	SPZ II-2	13p
Rocket Launcher	17p	171 German Destroyer	19p	215 German Armoured	13p
132 Anti Tank Obstacles	12p	Hunting Tiger	19p	Ambulance 2-2	13p
133 German Tiger II	19p	172 German Leopard Tank	19p	216 German Observation	13p
134 German Tiger II/182	19p	173 German 23T Destroyer	19p	Carrier SPZ 22-2	13p
135 U.S. Self Propelled	24p	174/175 German PZKW 3	19p	217 German 81 mm. Mortar	13p
203 mm. Gun M-110	24p	G/J	19p	Carrier SPZ 51-2	13p
136 U.S. Self Propelled	24p	176/177 German Assault Gun	19p	218 Tents and Empty	13p
155 mm. Gun M-109	24p	III 142/2	19p	Containers	13p
137 U.S. Self Propelled	24p	178 U.S. M4 Tractor Cargo	19p	219 Bridge Layer (U.S.)	20p
175 mm. Gun M-107	24p	179/180 Armoured 12T	19p	220 U.S. Medium Tank	20p
138 U.S. Tank Recovery	24p	Tractor M-26 A-1 with	19p	M48 A2	20p
Vehicle T119	24p	45T Trailer M-15 A-1	19p	221 U.S. Medium Tank M47	20p
139 U.S. Recovery Vehicle	24p	T121	19p		



### FRENCH MILITARY AIRCRAFT 1940 AND VETERANS

Scale 1:72

L0091 Bloch 152	27p
L0092 Dewoitine 520	27p
L0093 Morane 406	27p
L0094 Curtiss 75	27p
L0095 Les Mureaux 117	27p
L0096 Caudron 714	27p
L0097 Morane 225	27p
L0098 Morane 230	27p
L0335 Arc-en-Ciel	95p
L0390 Amiot 143	95p
L0391 Liore 45	95p
L391B Leo 451	95p
L0392 Breguet 693	95p
L0393 Bloch 174	95p
L0394 Potez 631	95p
L0396 Potez 63-11	95p
L0545 Bloch 210	£1.30
L0100 Spad VII	85p

### CIVIL AIRCRAFT

L0200 Alouette	1:50	85p
L0300 Caravelle	1:100	95p
L0320 Super		
Broussard	1:50	95p
L0325 Frelon	1:50	95p
L0340 S.A. 330	1:50	95p
L0700 Boeing 707	1:125	£1.65
L0705 Douglas D.C.8	1:125	£1.65
L0710 Noratlas	1:85	£1.65
L0720 Mystere 20	1:50	£1.65
L0855 Concorde	1:100	£2.25
L0856 Boeing 747	1:125	£2.25

### MODERN FIGHTERS AND BOMBERS

L0105 Trident	1:50	85p
L0120 Fiat G91	1:50	85p
L0305 Vautour	1:50	95p
L0310 Fouga Magister	1:40	95p
L0330 Vautour Night		
Fighter	1:50	95p
L0500 Etendard IV	1:50	£1.30
L0505 Breguet Alizé	1:50	£1.30
L0510 Mirage III C	1:50	£1.30
L0511 Mirage III R	1:50	£1.30
L0520 Jaguar Fighter	1:50	£1.30
(C)		
L0521 Jaguar Trainer	1:50	£1.30
(E)		
L0522 Jaguar Naval	1:50	£1.30
(M)		

L0715 Breguet		
"Atlantic"	1:100	£1.65
L0830 Mirage IV	1:50	£2.25
<b>WAR SHIPS</b>		
Scale 1:400		
L0540 "Surcouf" Destroyer		£1.30
L0541 "Maille Breze"		£1.30
Destroyer		£1.30
L0542 "Kersaint" Escort		£1.30
Vessel		£1.30
L0543 "Dupetit-Thouars"		£1.30
Guided Missile		£1.30
Vessel		£1.30
L0544 "Forbin" Destroyer		£1.30
L0860 "Colbert" Cruiser		£2.25
L0870 "Jeanne D'arc"		£2.25
Helicopter Carrier		£2.25
L1000 "Clemenceau"		£3.99
Aircraft Carrier		£3.99
L1005 "Foch" Aircraft		£3.99
Carrier		£3.99
L1015 "Richelieu"		£3.99
Battleship		£3.99
L1020 "Jean Bart"		£3.99
Battleship		£3.99
L0538 C.D.T. Riviere Escort		£1.30
Vessel		£1.30
L0539 "Victor Schoelcher"		£1.30
Escort Vessel		£1.30
L0301 "Redoubtable" Atomic		95p
Submarine		95p
L9901 "P.751" Coastguard		27p
Vessel		27p
L9902 "Mercurie" Minesweeper		27p
L9903 "La Combattante"		27p
Coastguard Vessel		27p

### HISTORIC SHIPS

L0765 "Nina" Caravelle XV		£1.65
Century		£1.65
L0770 "Pinta" Caravelle		£1.65
XV Century		£1.65
L0775 "Mataro" XV Century		£1.65
Merchantman		£1.65
L0865 "Santa Maria"		£2.25
Ship of Columbus		£2.25
L0905 "Phenix" Man o' War		£3.99
XVII Century		£3.99
L0910 "Royal Louis"		£3.99
Man o' War		£3.99
L0915 "Sirene" Galleon		£3.99
XVII Century		£3.99
L0920 "Indomptable"		£3.99
Man o' War		£3.99
L0835 "Le Galion" Spanish		£2.25
Ship XVI Century		£2.25
L0845 "La Stella" Spanish		£2.25
Ship XVI Century		£2.25
L0875 "Conquistador"		£2.25
Spanish Ship		£2.25
L0885 "Oseberg" Ship Viking		£2.25
Long Boat		£2.25
L0890 "Reine Matilde"		£2.25
Norman Ship		£2.25
XI Century		£2.25

L0840 "Corona" Spanish		£2.25
Ship XVI Century		£2.25

### MERCHANT SHIPS

Scale 1:200

L0600 "Epervier" Three		£1.65
Masted Sailing Ship		£1.65
L0745 "Volontaire" Deep		£1.65
Sea Trawler		£1.65
L0750 "Seine" Fleet		£1.65
Refueller		£1.65
L1010 "Avenir" Modern		£3.99
Passenger Ship		£3.99
L0795 "Belle Etoile" Four		£1.65
Masted Sailing Ship		£1.65
L0797 "Alcyon" Schooner		£1.65
1812		£1.65

### MERCHANT SHIPS

Scale 1:100

L0796 "La Fauvette" Steam		£1.65
Yacht 1900		£1.65
L0950 "Pourquoi-Pas" Polar		£3.99
Exploration Ship		£3.99
L0960 "Occident" 19th		£3.99
Century Steamer		£3.99
L0790 "Amphitrite" Three		£1.65
Masted School Ship		£1.65
L0955 "Brigantine" Sailing		£3.99
Ship		£3.99

### CARS

L0730 Renault	1:20	£1.65
L0735 Alpine A210	1:24	£1.65
L0736 Porsche 907	1:24	£1.65
L0737 Ferrari P4	1:24	£1.65
L0738 Mustang Cobra	1:24	£1.65
L0739 Ford Mk. II	1:24	£1.65
L0740 Matra F1	1:24	£1.65
L0755 Brabham F1	1:24	£1.65
L0760 Gordini 1500	1:24	£1.65
L0756 Lotus F1	1:24	£1.65
L0758 Brabham F1	1:24	£1.65
L0757 McLaren F1	1:24	£1.65
L0759 Porsche 908	1:24	£1.65
L0743 Matra P.650	1:24	£1.65
L0734 Ferrari 512S	1:24	£1.65

### MOTOR CYCLES

L0990 B.M.W. 750	1:8	£3.99
L0991 Honda 750	1:8	£3.99
L0992 B.M.W. Police	1:8	£3.99

L0970 Harley Davidson	1:8	£3.99
Easy Rider		
<b>CADET SERIES</b>		
<b>SAILING SHIPS</b>		
L0004 Santa Maria		22p
L0060 Bonhomme Richard		22p
L0065 Marie Gallant		22p
L0070 Providence		22p
L0075 Orgueilleuse		22p

### AIRCRAFT

L0001 Mirage III C		22p
L0002 Mirage III R		22p
L0003 Mystere IV		22p
L0005 Fouga		22p
L0006 Concorde		22p
L0007 Mirage IV		22p
L0010 Etendard		22p
L0014 SA 330 Helicopter		22p
L0015 Trident		22p
L0016 Jaguar C		22p
L0017 Jaguar E		22p
L0018 Jaguar M		22p
L0019 Lunar Module		22p
L0020 Breguet Alizé		22p
L0021 Apollo		22p
L0024 Starfighter F104		22p
L0025 Frelon		22p
L0026 Tupolev 16		22p
L0027 Skyhawk		22p
L0028 Sikorsky		22p
L0029 Bell 205 Helicopter		22p
L0030 Vautour		22p
L0035 Noratlas		22p
L0040 Mystere B II		22p
L0045 Alouette III		22p
L0050 Fiat G91		22p
L0055 Caravelle		22p
L0080 Mystere 20		22p
L0085 Breguet "Atlantic"		22p
L0090 X15		22p

### MODERN WAR SHIPS

L0008 Jeanne D'Arc		22p
L0009 Clemenceau		22p
L0013 Foch		22p

### MEN O' WAR

L0011 Phenix		22p
L0012 Royal Louis		22p

### APOLLO SPACE PROGRAMME

L0210 Apollo Space Set		85p
------------------------	--	-----

ALL SCALES SHOWN IN THIS LIST  
ARE APPROXIMATE.

### CATALOGUE

L9999 Catalogue. Approx.		
39 pages. Illustrated		
In Colour		10p

All prices shown on these lists are suggested retail prices. We reserve the right to alter them without prior notice.

Heller Construction Kits and Roco Minitanks are imported to this country solely by

**RICHARD KOHNSTAM LIMITED**  
13-15A HIGH STREET, HEMEL HEMPSTEAD, HERTFORDSHIRE

TRADE ENQUIRIES WELCOMED



## New books for enthusiasts every month—from Almarks

### ALMARK PRACTICAL GUIDES

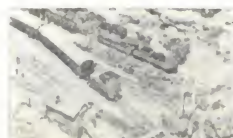


#### Scale Model Soldiers

Containing accurate illustrations, painting and modelling tips

Roy Dilley

TWO NEW TITLES READY SOON



#### 'N' Gauge Model Railways

Michael Andress

### SCALE MODEL SOLDIERS By Roy Dilley

A superb guide to collecting, assembling, converting, painting, and displaying miniature figures. Covers all scales—packed with text, drawings, over 70 pictures and 13 colour pictures. A 'must' for all model soldier enthusiasts.

Paperback £1.50; Hardback £2

### 'N' GAUGE MODEL RAILWAYS By M. Andress

A detailed guide to model trains and layouts in the smallest of scales. About 70 pictures, detailed text, layout plans, and dozens of ideas for getting the best from N gauge model trains.

Paperback £1.50; Hardback £2

### ALSO AVAILABLE:

NARROW GAUGE MODEL RAILWAYS by M. Andress

PLASTIC SCALE MODEL AIRCRAFT by W. R. Matthews

### AIRCRAFT OF THE RAAF, 1921-1971

Geoffrey Pentland

and Peter Malone

A KOOKABURRA PRODUCTION

A lavishly produced volume celebrating the Golden Jubilee of the Royal Australian Air Force. It records every aircraft type used, and gives full serial listings; 325 pictures, 65 in colour.



148 pp.  
20 pp. in full colour

11 1/4" x 8 1/2"

Hard covers

£3.25



Paper £1.50  
Bound £2



#### French Napoleonic Lancer Regiments

Michael G. Head

Paper £1.25  
Bound £1.75

### AMERICAN SOLDIERS OF THE REVOLUTION (War of Independence)

Covers both Patriot and Loyalist forces. Packed with text, drawings, old prints, and 9 superb colour plates showing the uniforms of the period.

### FRENCH NAPOLEONIC LANCER REGIMENTS By Michael G. Head

This highly detailed work covers the organisation, dress and equipment of Napoleon's light cavalry units. Scores of drawings, pictures, and 9 colour plates



### WEHRMACHT ILLUSTRATED

TWO NEW TITLES 50p each

No. 3 Panzer-Grenadiers. Packed with pictures, small arms drawings, organisation tables, 5 colour plates of uniforms and badges.

No. 4 Halbkettenfahrzeuge (Half-tracks). Full coverage of all basic service types, with 70 pictures and drawings data tables, text, etc. 3 colour plates



Already available  
No. 1 Afrika Korps  
No. 2 Panzerjager



Write with large SAE to address below for free catalogue



### ALMARK PUBLISHING CO. LTD.

270 Burlington Road  
New Malden, Surrey  
KT3 4NL

Tel. 01-949-1789



## YOUR INTERNATIONAL MODEL MAIL ORDER HOUSE

Suppliers to the British and Overseas Governments



### ★ ★ ★ ★

#### AUSTRIAN NAPOLEONIC

- AN-1 Hungarian Line Fusilier On Guard
- AN-2 Hungarian Line Fusilier Officer
- AN-3 Hungarian Line Grenadier On Guard
- AN-4 Hungarian Line Grenadier Officer
- AN-5 Hungarian Line Fusilier Advancing
- AN-6 Hungarian Line Fusilier Firing
- AN-7 Hungarian Line Grenadier Advancing
- AN-8 Tyrolean Jager Firing
- AN-9 Tyrolean Advancing
- AN-10 Austrian Foot Artilleryman Holding Rammer
- AN-11 Austrian Foot Artilleryman Holding Trail Spike
- AN-12 Austrian Foot Artilleryman Firing Gun
- AN-13 Tyrolean Jager Officer
- AN-14 Tyrolean Jager Fusilier Standard Bearer
- AN-15 Hungarian Line Grenadier Standard Bearer
- ANC-1 Austrian Dragoon\*
- ANC-2 Austrian Cuirassier\*

#### RUSSIAN NAPOLEONIC

- RN-1 Line Grenadier On Guard
- RN-2 Line Grenadier Advancing
- RN-3 Line Grenadier Firing
- RN-4 Line Grenadier Officer
- RN-5 Line Musketeer On Guard
- RN-6 Line Musketeer Advancing
- RN-7 Line Musketeer Firing
- RN-8 Line Musketeer Officer
- RN-9 Line Grenadier Officer
- RN-10 Foot Artilleryman Holding Ball
- RN-11 Foot Artilleryman Holding Rammer
- RN-12 Foot Artilleryman Firing Gun
- RN-13 Foot Artilleryman Holding Trail Spike
- RN-14 Line Jager Advancing
- RN-15 Line Jager Firing
- RN-16 Line Jager Officer
- RN-17 Line Musketeer Standard Bearer
- RN-18 Pavlov Guard Grenadier

#### PRUSSIAN NAPOLEONIC

- PN-1 Line Grenadier On Guard
- PN-2 Line Grenadier Advancing
- PN-3 Line Grenadier Firing
- PN-4 Line Grenadier Officer

#### TAMIYA MILITARY VEHICLES

- PNZKVII 99p
- 1/35 V.W. Schwimmwagen 67p
- 1/35 V.W. Kubelwagen 67p
- 1/35 German Hanomag Half Track £1.30
- 1/35 Afrika Korps 24p
- 1/35 German Infantry 24p
- 1/35 German Officers 24p
- 1/35 British Infantry £2.60
- 1/35 British Centurion Tank £2.60
- 1/35 British Chieftain Tank £2.60
- 1/35 German Tiger Tank £2.60
- 1/35 German Hunting Tank £2.60
- 1/35 Saladin Armoured Car £1.15
- 1/35 German King Tiger £2.30
- 1/35 German Leopard Tank £2.30

WE ALSO STOCK FIGURES BY HISTOREX — LASSET — HINTON — ROSE — ALMARK — HINCHLIFFE — LAMMING — STANDISH — AIRFIX — LES HIGGINS — OLIVE — MINOT

POST AND PACKING Please add 10% to all orders up to £5.00 (min. 10p). Over £5.00 post free. C.O.D. Charge 45p.

### ★ ★ ★ ★

#### MINIATURE FIGURINES 20 mm "WARGAME FIGURES"

- PN-5 Line Musketeer On Guard
- PN-6 Line Musketeer Advancing
- PN-7 Line Musketeer Firing
- PN-8 Line Musketeer Officer
- PN-9 Line Grenadier Standard Bearer
- PN-10 Foot Artilleryman Holding Ball
- PN-11 Foot Artilleryman Holding Rammer
- PN-12 Foot Artilleryman Holding Trail Spike
- PN-13 Foot Artilleryman Firing Gun
- PN-14 Line Fusilier Advancing
- PN-15 Line Fusilier Firing
- PN-16 Line Fusilier Officer
- PN-17 Line Musketeer Standard Bearer
- PN-18 Guard Grenadier On Guard
- PN-19 Guard Grenadier Advancing
- PN-20 Guard Grenadier Firing
- PNC-1 Dragoon\*
- CC-2 Moroccan Cavalryman Charging\*
- CC-3 Afghan Cavalryman Charging\*
- BRITISH COLONIAL
- BC-1 British Infantryman Advancing
- BC-2 British Infantryman Firing
- BC-4 Highland Officers
- BCC-3 British 17th Lancer Charging\*
- BRUNSWICK NAPOLEONIC
- BRN-1 Infantryman On Guard
- BRN-2 Infantryman Advancing
- BRN-3 Infantryman Firing
- BRN-4 Infantry Officer
- NAPOLEONIC ARTILLERY
- NFA-2 French 5.5" Field Howitzer
- NFA-3 French 24 lbs Siege Howitzer
- NFA-4 British 9 lb Field Gun
- NFA-7 British Rocket Launcher
- NFA-2 Limber Horse Pulling

### UNREPEATABLE OFFER

Footfigure 3p Mounted 10p

Please give alternatives when ordering

#### MARLBURIAN

- MAL-1 Marlburian Musketeer Advancing (Tricorn Hat)
- MAL-2 Marlburian Musketeer Firing (Tricorn Hat)
- MAL-3 Marlburian Musketeer Officer (Tricorn Hat)
- MAL-4 Marlburian Musketeer Advancing (Mitre Hat)
- MAL-5 Marlburian Grenadier Firing (Mitre Hat)
- MAL-6 Marlburian Grenadier Marching or Throwing Grenade
- MAL-7 Marlburian Grenadier Officer Charging (Tricorn Hat)\*
- MALC-1 Marlburian Dragoon Charging (Tricorn Hat)\*
- MALC-2 Marlburian Horse Grenadier Charging\*

#### INDIAN COLONIAL

- CI-1 Bengal Infantryman Advancing
- CI-2 Gurkha Infantryman Advancing
- CI-3 Afghan Tribesman Advancing
- CI-4 Indian Sudhaina Sikh Infantryman
- CI-5 Egyptian Infantryman Advancing
- CC-1 Bengal Lancer Trotting\*

#### BRITISH NAPOLEONIC

- BN-4 Light Infantryman Officer
- BN-5 Line Infantryman Firing
- BN-6 Highlander On Guard
- BN-9 Highlander Advancing
- BN-10 Artilleryman Carrying Bucket
- BN-11 Foot Artilleryman Holding Rammer
- BN-12 Guard On Guard
- BN-16 Guard Officer
- BN-19 Fusilier Officer
- BN-21 Line Infantryman Officer With Colours
- BN-28 Marine Advancing
- BN-29 Marine Officer
- BN-30 Horse Artilleryman Carrying Cannister Shot
- BN-33 Horse Artilleryman Sighting Gun
- BN-35 Light Infantry Officer
- BN-36 Highland Piper
- BNC-5 Line Infantry Mounted Colonel\*
- BNC-1 British Hussar\*
- BNC-2 Royal Scots Greys\*
- BNC-3 British Heavy Dragoon\*
- BNC-6 Household Cavalry\*
- BN-7 Light Infantryman On Guard
- BN-17 Line Infantryman Lunging
- BN-20 Line Infantryman Advancing

### ★ ★ BOOKS FOR WAR GAMERS ★ ★

- Infantry Uniforms 1855-1939 £1.50
- Military Uniforms Of The World £1.50
- Regiments At Waterloo £1.75
- British Infantry Regiments Of Marlboroughs £1.35
- French Army Regiments £1.25
- French Lancer Regiments £1.50
- French Napoleonic Regiments £1.75
- French Napoleonic Artillery £1.50
- German Combat Uniforms £1.25
- The Waffen "SS" £2.25
- German Army Uniforms & Insignia £4.25
- Badges Of The British Army £1.50
- Buttons Of The British Army £1.50
- British Cavalry Standards £1.75

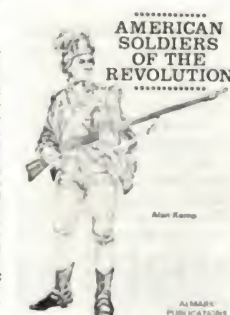
### ★ ★ NEW ALMARK BOOK ★ ★

#### AMERICAN SOLDIERS OF THE REVOLUTION

By Alan Kemp

This fine new book covers the American troops who fought on both sides in the War of Independence. More than half of the book deals with Patriot regiments, from the various contingents of Minute Men to the crack regiments of the Continental Army, Infantry, Cavalry, Artillery, and Service arms are covered. In part two of the book the American Loyalist regiments are featured, ie, those who fought on the British side in the war. Infantry and Cavalry regiments are described and their uniform is illustrated. Apart from the uniform colour plates a major feature is the coverage of regimental flags, some of which are shown in full colour. We understand that subsequent volumes will deal with British and Allied troops of the War of Independence.

DE-LUXE CASEBOUND EDITION £2.00  
PAPERBACK EDITION £1.50



BMW MODELS, 327-329 HAYDONS ROAD, WIMBLEDON, LONDON, S.W.19 01-540 7333/4



## SAAF Dakotas—from page 434

serial were repeated in black figures just below the anti-glare panel on the tip of the nose. Three Dakotas in this scheme from 28 Sqn (including 6843 and 6861) took part in 'Oefening Vlerk' (Exercise Wing), the first post-war Army/Air Force exercise in the Orange Free State, a province of the Republic.

From 1960-61, Dayglo was introduced on Dakotas in two different schemes. The standard scheme was as follows: Entire nose (less anti-glare), a panel above the cockpit, wide band around rear fuselage, upper half of fin, tips of wing and tail surfaces and a further band around wings just outboard of the engine nacelles, all in dayglo. The fuselage serial was re-positioned 2 inches forward of the fin flash. This scheme was worn, plus its standard red crosses by the Dakota ambulance as well.

VIP Dakotas had in addition further narrow bands of dayglo placed parallel to and behind the nose and rear fuselage bands, below the fin band and inboard of the wingtip and stabiliser tip bands. The inner wing bands remained unchanged. Proportions of the thicker bands on the VIP aircraft differed from the standard scheme. Initially, blaze orange was used but later this was replaced by the redder fire orange. In both cases, bands did not encroach on to control surfaces.

With the retirement of the Ventura from service, the SAAF lost their Ventura target tug conversions. Consequently, in late 1960, a C-47A, 6877, was modified into a target tug, carrying the



Above, top to bottom: Target tug C-47A, serial no 6877 of 25 Sqn; stabilisers are all black and stripes on wings are parallel. VIP Flight 'Fleur', serial no 6852, in polished metal/blue/white finish with blue cabin lettering. C-47A-1-DK serial no 6814 of 44 Sqn in standard current scheme with orange wing and tail tips, blue strip and anti-glare panel. Recent additions to roof aerals, silver finish more usual. Undersurfaces as drawing on previous page. Left: Dakota no 78 in standard 'castle' markings.

suited to the MR task, ie, the Piaggio P166S Albatross.

In 1963, No 44 Sqn became a combined CF/PF squadron flying from Swartkops aerodrome. By 1965, many of 44 Sqn's Daks sported squadron badges—and had acquired many new Daks, as 28 Sqn had re-equipped with C-130Bs. Some Daks, such as 6837, had dispensed with Dayglo, which was a problem to maintain being very prone to fading.

Other units such as the Air Operations School, CFS, and various station flights also had Daks on strength, 6879 being with AOS and 6884 with CFS (the latter force-landed near Port Elizabeth on November 16, 1967).

In 1965, Dakotas began appearing with the last two figures of the serial in large black figures on the rudder for easy identification and, late in the following year, more and more Dakotas appeared without the Dayglo markings.

By 1967 many 44 Sqn Daks, now without Dayglo, had the tips of wings, tail, fin and rudder painted in insignia orange. In 1968, the Cape-based Dakotas of Maritime Group began to follow suit, differing in not having the orange tips and also in deleting the fin serial.

Yellow on black, and black on yellow 'rescue' markings became standard and some Dakotas displayed additional roof aerals.

VIP Dakotas could be distinguished by the SAAF flag, highly polished finish and legend above cabin windows, and by 1970,

Continued on page 451

ML winch from a Ventura under the centre section plus other assorted target tug gear.

Apart from the white top, blue stripe and silver rudder which was retained, the aircraft was finished in all over training yellow with 3 ft diagonal black stripes placed 6 ft apart, resulting in a unique and striking-looking aircraft. 6877 was attached to the Ysterplaat AFB station flight and when this unit was re-numbered 25 Sqn, joined its strength, with which it serves to this day.

On December 15, 1961, nose serials were added, being the 'last two' only, in 8 inch yellow figures on the blue of the anti-glare panel. The blue anti-glare panels on the motors were phased out after November 24, 1960, though this in effect was slow.

Not all the Daks switched to these schemes and one or two at this stage were still in all-silver painted finish (though marking and serial re-positioning had taken place, as on 6825, a C-47A).

In October 1962, 27 Sqn was formed as a Short Range Maritime Recce Sqn, using the venerable old Daks, some being improvised later with racks for stores under the centre section and it was not until 1969 that these could be replaced by aircraft better

Below, left to right: 44 Sqn badge: wings are white with black edging. Springbok: brown with black hooves and eye. Sea: blue with green continents, yellow outer edging to world. Ribbon below: blue with yellow lettering. ESK 44 SQN. is black. 21 Sqn aircraft serial no 6852, 'Fleur' in black, 21 Sqn. badge green/gold, Springbok head and bomb in centre. 21 is written in Roman numerals. Motto: 'onoor winlik', ie, cannot be beaten. SAAF National marking circa 1950, colours are ultramarine and white with orange springbok.



1

2



3



4



5

With the exception of the two pictures of RAF aircraft (credited individually), all this month's contributions come from A. R. Chapman and show German and French aircraft at the time of the invasion and occupation of France in May/June 1940. (1) A Junkers Ju 87B in splinter camouflage (or possibly plain dark green) with Helblau undersides on a French airfield. (2) A late production Spitfire IX MJ171:2-GZ of 32 Sqn, with pointed spinner and clipped wings. Spinner is black and the motif under the cockpit appears to be a stylised shamrock presumably in green (Sqn Ldr G. N. B. Miller). (3) A magnificent view of a Heinkel He 118 on an advanced landing ground in France and partially draped in camouflage netting. It appears to be finished in dark green and Helblau. Coding on fuselage is obscured by the net. (4) A Bloch MB 174 is examined by Luftwaffe personnel after the occupation of Abbeville. (5) A wrecked Mureaux 117, coded 64 under the wing, also at Abbeville. (6) A Messerschmitt Bf 110C-4 A2+BB of ZG 52. (7) Coded 50, this machine has eluded our reference books. Can anyone identify? (8) Catalina IB FP313:N of 265 Sqn is shown in flight between Pamanzi and Diego Suarez over the Indian Ocean in 1942. Note full ASV aerals. Name in script on nose appears to be 'Jane'. Finish is dark sea grey/slate grey/white (Christopher Baty).



6

8

7





# Crusader AA Tank

Interesting conversion using plastic card and scrap

by Gerald Scarborough



Above: Completed model of the Crusader tank showing the new turret made from plastic card as described in text.



Above top left: Normal Crusader kit with modified side shields as suggested in text. Left: Dead side view of the AA tank. Note realistic track sag on this and the Mk III above obtained by using Copydex adhesive on the underside of the tracks. Above: Normal Crusader hull with new plastic card turret just before painting.

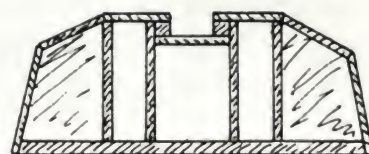
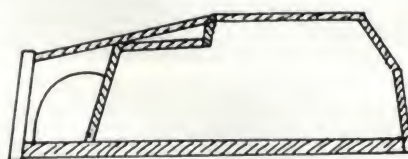
THE new Airfix Crusader kit gives yet another base for some simple little conversions and one of these that I've tackled is the Crusader AA tank. Their use was severely limited as the numerical superiority of the Allied air forces left them few targets after the Normandy invasion, for which they were specifically adapted.

There are just a few points about the kit itself; it is about 3 mm too high and 9 to 10 mm too long, but as I have not personally measured the genuine article and am only going on published dimensions, I stand to be corrected. Nevertheless, the model is very nicely moulded and goes together well and looks like a Crusader—and that to me is what matters most. On the other hand, you can carry out the modifications described in the Crusader article in *Airfix Magazine* February 1971.

For the anti-aircraft conversion the main alteration is, of course, a new turret mounting a twin Oerlikon 20 mm cannon, but first we must construct the basic Crusader Mk III hull. Parts 70 and 71 are not used and study of the kit parts will show that to make a neater job the locating ridge underneath the stowage

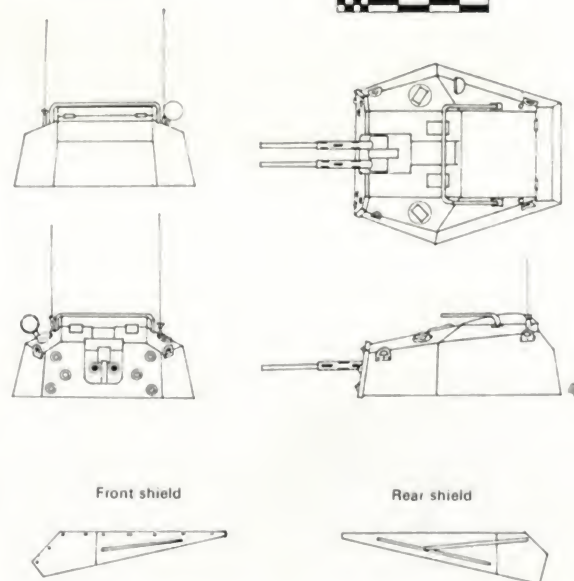
boxes on the hull top, part 20, will need carving away. Also cut off the rear of the track covers to the angle shown on the drawing and carve the sides, under the exhaust expansion boxes, to allow the new dust shields to fit neatly. Another little job to improve the detailing is to remove the headlamp guards and replace these at a latter stage of construction with new parts bent up from lengths of stretched sprue.

Now continue with the construction of the basic hull, painting as you go, in particular the road wheels, idlers, sprockets and track before adding the new dust shields at front and rear. To seat the top run of the track to the road wheels, try a drop of Copydex, it seems to have worked on mine with no ill effects so far. You could now fit the standard Mk III turret and have a different-looking Crusader as shown in the photographs, or you can go on and make up the AA turret version.



Cross sections of AA turret showing shielding thickness. Not to scale

1:76 scale drawing of Crusader anti-aircraft turret



Front shield

Rear shield

Below: Close-up of turret with lifting eyes and rivet detail clearly shown. Note also the twin Oerlikon cannon made from scrap.



This turret looks a fairly complicated shape but its construction should be clear from the drawing, sketch and sectional views. Commence with the base from 30 thou plastic card, accurately cutting out 15 thou undersize all round, 30 thou at the front. This is, of course, to allow for the thickness of the sides and is most important to get right, otherwise you will obviously finish up with an oversize turret. To this base we now add the four identical vertical shapes to give a base on which to build the top and sloping top sides. These must all be absolutely identical and their shape can be taken direct from the side view of the turret, but again allowing for the 15 thou thickness of the top and rear, and the 30 thou of the bottom and front. Add these to the base so that the two inner ones form the inside faces of the cannon mounting

and the two outer come into the correct position for mounting the top, but do ensure they are all vertical. When these are dry, add a flat rear top at this stage (fitting the curved hatch later), the two rear faces and then the gussets, to support the sloping top sides, which you will note run forwards at an angle, to be underneath the join line.

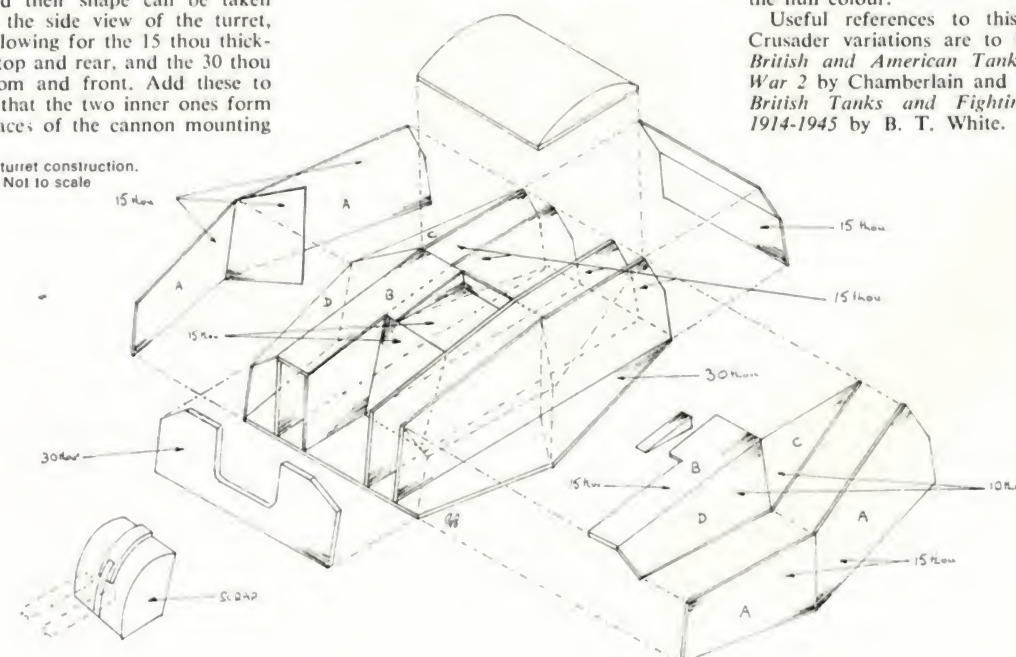
For the next stage add the four side pieces 'A', chamfering the edges where necessary to get a nice, clean fit, followed by the top pieces 'B' and the sloping top

sides 'C' and 'D' from 10 thou plastic card. These can be fitted to overhang at the sides and then trimmed off when dry. It only remains to fit the small inside faces to form the gun aperture, the front armour and the curved top entrance hatch to complete the main assembly.

Final details, the gun barrels, mounting, ventilators, vision blocks, lifting lugs, radio aerials, etc, are as shown on the drawings and photographs of the model. To mount on the hull, drill a hole in the underside and insert a suitable spigot from scrap sprue and then paint to match the hull colour.

Useful references to this and other Crusader variations are to be found in *British and American Tanks of World War 2* by Chamberlain and Ellis, and in *British Tanks and Fighting Vehicles, 1914-1945* by B. T. White.

Basic turret construction. Not to scale



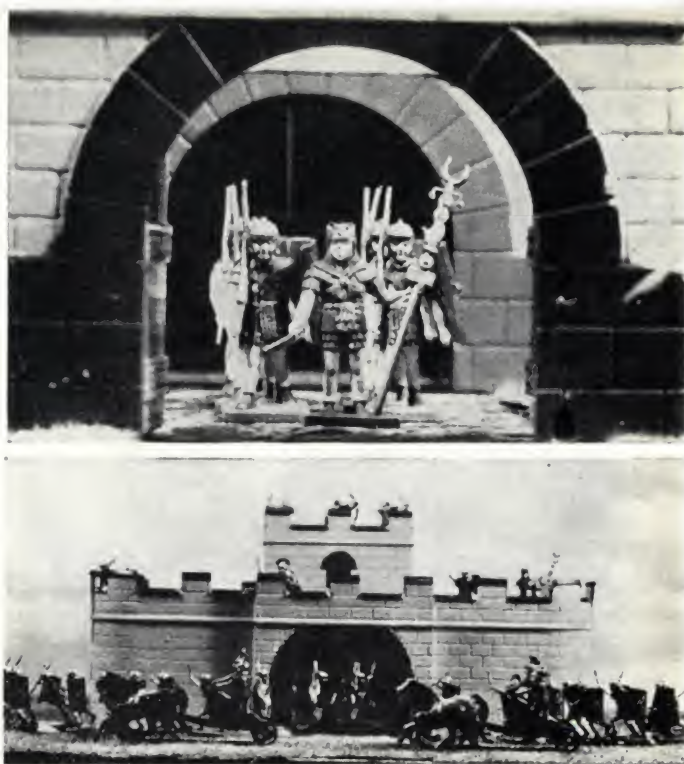


## Museum Diorama—from page 419

attach them to the ground by means of a small pin through one of the hooves.

As well as showing the formations of the troops and the encounters of the Battle at its height, the diorama also provides a unique display of the various standards and banners carried by the knights of this period in history, when the art of medieval heraldry was at its best. Over 120 flags decorate the scene in colourful array, as it must have appeared to the opposing armies 500 years ago. Edward IV, with the Yorkist emblems of the Sun in Splendour, the White Rose and Lion of March, his brothers George, Duke of Clarence, under his banner of the Black Bull, and Richard, later King Richard III, with his White Boar, facing Somerset bearing the Beaufort Portcullis and Lancastrian Silver Swan. We are again fortunate that contemporary lists have been preserved of those knights created after the Battle, as well as the names of Lancastrians killed or executed. Their correct heraldic arms have been patiently researched, and each of the individuals can be identified by referring to charts bearing their shields which hang opposite the model. These details have also been incorporated into a booklet which comprises a 'Roll of Arms' of the participants in the Battle of Tewkesbury.

The illustrations on the right show what can be done with a little ingenuity and a good camera angle. The model shown is the standard Airfix 'Caesars Gate' kit with figures to match (T. C. Hammetman.) In the near future we hope to run a series of articles on expanding this kit just as has been done with the Sherwood Castle series just completed.

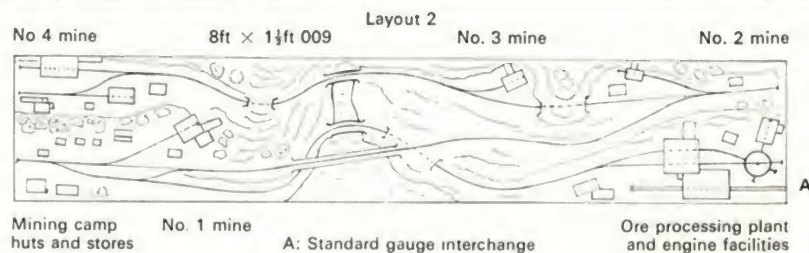


## Basic Layout Planning—from page 434

tunnels, trees, buildings, cuttings, avalanche galleries, etc., will help to separate the tracks visually.

These features also split up the run and give the impression of a greater length of travel for the trains. Tunnels are especially effective for this but should be used sparingly on your layout; they are expensive to build on prototype lines and are avoided when possible, particularly on narrow gauge lines where the sharp curves that can be used allow the track to go round rather than through the hills. For this reason I have shown only two short tunnels on my plan, but you could have more if you wish.

The arrangement of the two bridges on the two lower tracks should be an interesting scenic feature and I envisage this as having come about as follows. The line was originally built to link the No 1 mine with the processing plant and to avoid the extra expense of a longer bridge the line was curved fairly sharply on each side of the lake to reach the short bridge across the river where it enters the lake. Later the line was extended from this mine up to the No 2 Mine. To do the same sort of thing with this track would have meant an excessive amount of rock and earth removal to allow the line to curve round to cross the river and it was more economical to carry the line directly across the lake where it is becoming narrow, and also over the low level track, on a long bridge. To support this explanation the banks of the river



behind the low level bridge should be steep and rocky.

It is always a good plan in designing a layout to try to visualise how the scene would have looked before the railway was built and to think how a real railway company would have placed their tracks for maximum efficiency and minimum cost. This may prevent you ending up with a scheme so obviously impracticable that the realism is impaired. Of course considerable compromise is necessary in a model railway but a little thought beforehand can do a great deal to improve the final result.

Traffic on this mining layout will be mainly trains of ore wagons but from time to time stores, explosives, and machinery must be delivered to the mines. You can also run trains with workmen's coaches for the miners.

Operation can be made more complex and interesting by introducing some extra complications. For example, you can restrict the length of trains of fully loaded ore wagons being brought

downhill, either over the whole line, or even more interesting over only a particularly steep section. Thus a train must be split up and taken over this part in two sections, and then rejoined for the rest of the descent. You can also make it a rule that the engine must always be at the front of the train and must therefore run around its train at each reversal of direction where a run around loop is provided, and another engine must be used where there is no loop (at Mines No 2 and 4). The use of a second locomotive as a helper engine over steep sections of the line will also make operating more interesting.

Alternatively if you wish to simplify operation the layout could be modified to replace the track arrangements at Mines 1 and 2 by loops so that there is an uninterrupted run between Mine No. 4 and the processing plant. However, the loops will give a less effective scenic appearance even if they are partly concealed and simplifying operation will make it less interesting.

# BOOKS for modellers

Unless otherwise stated, books reviewed are normally available from your local bookshop or from hobby shops which sell books for enthusiasts, including the mail order stockists advertising in this magazine. As a last resort they can be obtained from the publishers whose addresses are given when known. In all cases of mail order, however, suitable postage should be added to the selling prices quoted.

## MILITARY

The Connaught Rangers.

Alan Sheppard.

The Arab Legion.

Peter Young.

US Cavalry.

John Selby.

Royal Scot Greys.

Charles Grant.

Men-at-Arms Series, Osprey Publishing Ltd, Reading, Berks.

£1.25 each.

FOUR new titles have just been released by Osprey in their Men-at-Arms series, in their usual format they cover three out-of-the-ordinary units and one that is known the world over for their headlong charge at the battle of Waterloo. We refer of course to the Royal Scots Greys. This particular book, coming as it does shortly before the release of the Airfix Royal Scots Grey, should be of interest to those intending to model the figure.

All four books have eight pages of colour illustrations and numerous half-tones throughout their texts which is a summarised account of each formation's history and dress during the period of their existence till eventual disbandment or amalgamation.

Uniforms of the American, British, French, and German Armies in the War of the American Revolution, 1775-1783.

Charles M. Lefferts.

WE Inc, New York, distributed in UK, British Commonwealth, and Europe by Patrick Stephens Ltd, 9 Ely Place, London EC1.

£3.80.

FIRST published in a limited edition of only 500 copies, this highly detailed book became a collector's item in a short time. For 30 years, Lt Lefferts devoted almost all his time to this work, researching in archives in Great Britain, France and Germany, and every known source in the

United States. He read Revolutionary orderly books, diaries, old newspapers, and histories for further information that would throw light on the subject. Each uniform plate is accompanied by descriptive text on the history of the unit and colours of the uniform illustrated. A new section on the Continental Army has also been added, and a selection of plates of famous battles and some of the characters involved in the war. This book is quite the most comprehensive we've seen on the subject and should be of great interest to model soldier enthusiasts.

US Cartridge Company's Collection of Firearms.

WE Inc, New York,

distributed in UK, British Commonwealth, and Europe by Patrick Stephens Ltd, 9 Ely Place, London EC1.

£2.80.

FEW advanced collectors and military historians know the origin of the US Cartridge Company's Collection of firearms. It was sold at auction to the company in 1899, the majority of the pieces coming from the famous firearms collection of A. E. Brooks of Hartford, Connecticut. The collection was then placed in cases at the main office of the US Cartridge Company in Lowell, Massachusetts, and over the next 20 years the Company added to the collection.

It became one of the most famous arms collections in the country. Every type of major firearm from the Revolutionary War, War of 1812, American Civil War, Spanish-American War and World War One, was in the collection. There were also many other intriguing war relics such as cannon, crossbows and other antique weapons. When the first post-war recession occurred in the 1920s, the US Cartridge Company needed to raise money, and so the collection was auctioned.

Original copies of this book, which has been out of print for some time, are much

sought after by private collectors and rare book dealers. There are many illustrations depicting the collection and entries have been made by separating the firearms into hand and shoulder weapons. Each arm is described in detail as to its manufacture, action, period of use, function and markings.

United States Single Shot Martial Pistols, 1776-1945

Charles Winthrop Sawyer.

WE Inc, New York,

distributed in UK, British Commonwealth and Europe by Patrick Stephens Ltd, 9 Ely Place, London EC1.

£2.40.

NO group of American firearms is more interesting to collectors, historians and dealers than the single shot martial pistol (sometimes called horse pistol by gun collectors). These were used by the US Army, Navy and Militia until the adoption of the revolver and later automatic pistols. This facsimile reprint, out of print for over half a century, was extremely rare, and everyone interested in this important field of collecting will welcome this reprint which gathers together pertinent data and illustrations of all significant US single shot martial pistols manufactured. All the famous makers are covered, as well as those pistols made in US armouries, or by private individuals and companies under contract to the United States. Pistols using flint-lock, percussion and metallic cartridge are also described.

Rules for Wargaming.

Arthur Taylor.

Shire Publications, Gubblicote Cross, Tring, Herts.

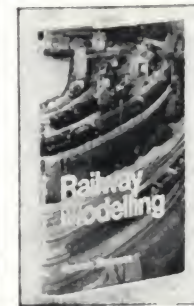
40p.

THIS book sets out to give a set of wargame rules dispensing for the most part with the use of dice, intending thereby to make the results of any game dependent on skill and judgment, rather than on the fall of the dice. Whether the author succeeds or not is open to doubt. We, for instance, find the book as a whole over simplified, arbitrary, with little or no justification given for some of the statements and rife with generalisations which do not always stand up to close scrutiny.

Taking just two examples to amplify the above statements, the ground scale suggested in the book is 1 mm to 1 yard, which seems 'short' compared to the standard 25 mm figure which is based on

Continued on page 452

## ATTENTION ALL RAILWAY MODELLERS!



## HOW TO GO RAILWAY MODELLING

By Norman Simmons

Fifth in the 'How To Go' series, this book has chapters on layout planning, electrical wiring, track laying, locomotives, carriages and wagons, scenery and operating. Written by an expert Airfix Magazine contributor, it also explains the organisation of the hobby, the clubs, the manufacturers, etc. 216 pp, 8 1/2" x 5 1/2", over 211 illu., case bound. Published on April 27. £2.60 net, plus 13p p & p.

Order from booksellers, model shops or from the publishers, Patrick Stephens Ltd, 9 Ely Place, London EC1N 6SQ

To: Patrick Stephens Ltd, 9 Ely Place, London EC1N 6SQ

Or: Your leading bookseller or model shop

Please send me one copy of HOW TO GO RAILWAY MODELLING. I enclose my remittance of £2.60, plus 13p post and packing.

NAME

ADDRESS

(Block caps please)

A/472



A Vengeance at dispersal, with 250 lb bombs on her wing racks. Believed to be an aircraft of 82 Squadron. Note the starter trolley by the starboard wheel.



### Part 35: Victory in the East

WAVELL'S 1943 Arakan campaign had limited success, yet until it took place there was only limited air activity. Although the Army made a satisfying advance, and Akyab was reached, it could not maintain its position. Vengeances and Blenheims usually wearing Dark Green/Dark Earth/Sky camouflage (although some of the Blenheim Vs had Middle East colours still) gave good support, but it was rather too soon after the disaster of recent months for such an extensive venture. The Royal Air Force also gave active support to General Wingate's first Chindit strike behind the Japanese lines in Burma, but it was principally transport aircraft that were involved.

The thrust into Arakan ended as the monsoon broke in June, 1943, a period of intensive army support being brought to an end. Currently the bomber element of the Air Force in India included seven squadrons out of a total of 53, and changes were afoot. Nos 11 and 60 Squadrons were still flying Blenheim IVs and three squadrons had the unpopular Blenheim V, machines which had outlived their usefulness. What was needed was very close tactical support for the Army, a role in which the Blenheim was unsatisfactory. Therefore large deliveries of Hurricanes were made to the Theatre at this time. Between August and October, during the rainy season, they replaced Blenheims in Nos 11, 34, 42, 60 and 113 Squadrons, final Blenheim operations being flown in August, 1943.

Although the Vengeance had given surprisingly good account of itself as a dive-bomber during the Arakan thrust it was only safe when air superiority was assured. Desirable as it was no immediate replacement type was to hand. A Command decision was made, and Air Ministry agreed, to see whether the Mosquito was suitable for this area. Although the Mosquito had at birth been designed to be suitable for tropical service, doubts were held about its wooden construction, and its adhesives. How would the high humidity affect the aircraft? Inevitably it seemed the Mosquito might be eaten by lesser breeds of insect!

Vengeance AP137 photographed over India wearing green-brown-sky colouring with UK style Type C markings. Aircraft in the hands of 82 Squadron.



Four Mosquito IIs were shipped to India in May, 1943, and picketed out to assess the effect of weather and other influences. To those in the Theatre the temptation to use them offensively was too great to resist—they soon reached Nos 681 PR and 27 fighter-Squadrons. The requirement was really for the Mosquito FB VI, but this was only just entering service and was in great demand in the Mediterranean area, and especially in north-west Europe. For the time being the Vengeance must soldier on.

For night bombing operations the first advance was the arrival of the Wellington BX with which Nos 99 and 215 Squadrons equipped in 1943. The first Mk Xs are believed to have reached India in July, 1943. These wore the same Dark Green/Dark Earth/Night camouflage common to home based machines, red letters and serials and South-East Asia roundels.

Expansion of the long-range bomber force began in August, 1943, with the formation of No 355 Liberator III Squadron at Salbani on August 18. At this time Mk IIIs also formed the backbone of No 159 Squadron.

A major alteration to the entire RAF organisation in India came in November, 1943, with the formation of SEAC, South-East Asia Command, the British and American Air Forces coming under one Command. With the arrival of Vice-Admiral Lord Louis Mountbatten as Supreme Commander of SEAC, the whole area was revitalised. The combined air force was re-organised into three large groups, as a Tactical Air Force, Strategic Air Force and Troop Carrier Command. These had four principal tasks: (1) To destroy the Japanese air force in Burma, (2) The defence of India, (3) Give support to the 14th Army and (4) Support General Wingate's jungle offensive.

By December, 1943 49 RAF squadrons were operational and an additional 12 were working up. Airfields, almost non-existent in 1942, had been carved out of seemingly impossible places and, even more important, a large number of Advanced Landing Grounds from which operations would be undertaken had been built.

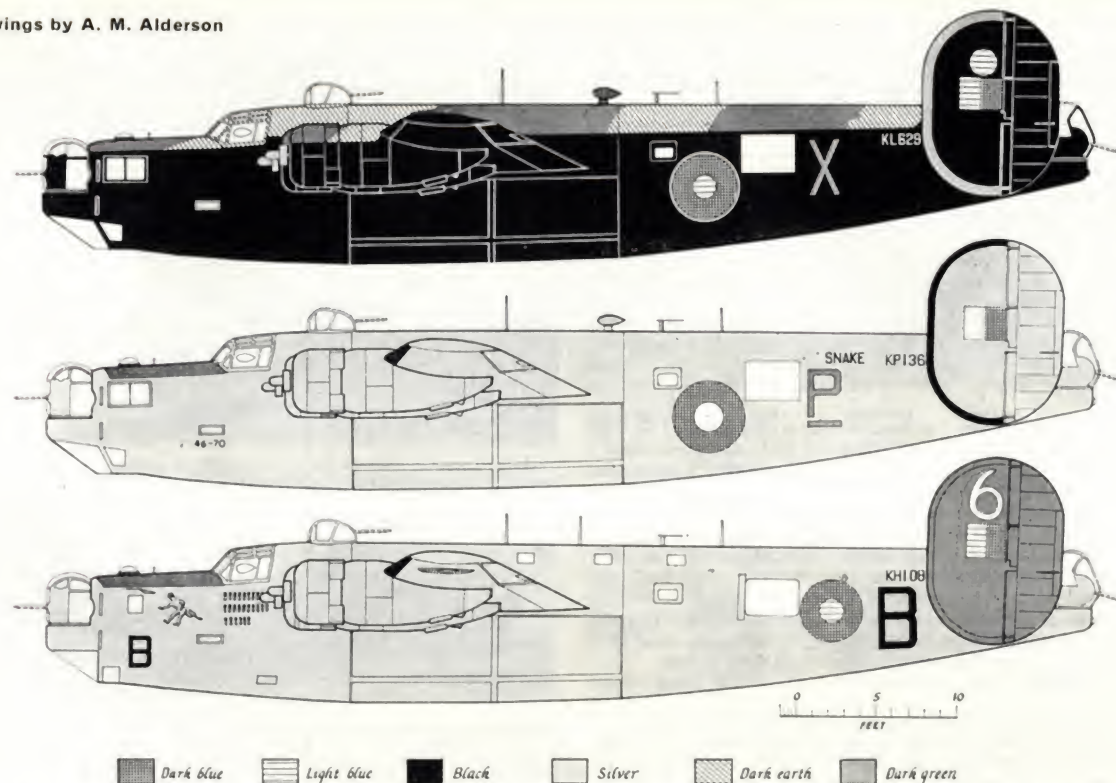
Despite appalling weather Wellingtons and Liberator IIIs were attacking communications and supply dumps in Burma, leaving the Vengeances to operate around forward positions. There was no visible front line, for the troops faced each other in jungle areas where there were few distinctive features, the lines passing haphazardly across rivers, clearings, swamps and high ground, all of which made it difficult for the air forces mounting operations overhead.

At the end of 1943 a four-pronged thrust into Burma began. Again the Vengeance squadrons gave close tactical support leaving Wellingtons to attack by night, airfields, ports, roads and rail communications, the latter being most important to the enemy. A quarter of the longer range bombing operations were directed against railways especially around Rangoon and on the Burma-Siam route, which cost so many British lives during its construction. Aircraft used by No 99 Squadron during these raids included HE957:A, HE958:B and HZ948:K. A typical Mk X was HZ950 which wore the usual camouflage and roundels and had Z ahead of the roundels in red and serial placed above the tailplane.

Using their very long range capability, Liberators could hit the rail installations as far away as Bangkok and Moulmein, but for the crews these long flights were exceedingly tough going because of the length of time spent in the air.

At the beginning of 1944 the Liberator force was further expanded, and re-vitalised by the introduction of the Liberator B.Mk VI. On January 15, 1944. No 356 Squadron, first to equip with Mk VIs, was formed at Salbani. Mk VI aircraft wore two similar schemes. Many were initially delivered in American camouflage of khaki green with

Drawings by A. M. Alderson



**Top:** Liberator B VI KL629:X of 99 Squadron wears a style of camouflage scheme carried by some Far East Liberators. More usual was natural finish and Dark Green/Medium Grey, or Olive Drab/Neutral Grey and combinations of these colours. KL629 has Dark Green and Dark Earth upper camouflage. Her letter and numbers are red, and the fuselage roundel appears to have a very fine yellow outline. **Centre:** KP136 is in natural finish, the aircraft letter and bar being grey. Her roundel centre and fin flash seem to have white areas or very pale blue. The anti-dazzle panel is Dark Olive Green. **Bottom:** KH108, also in natural finish, is more unusual. She has additional airdials and three high set windows. 'B' was four feet high in black on the rear fuselage and the figure '6' was crudely applied in white chalk on the olive green fin when the details of the aircraft were recorded in October 1944. There was a black B on the nose two feet high and 26 missions symbols were painted on and a khaki-coloured Japanese soldier being prodded by a black pitchfork had been applied. On the tail of each bomb painting was added a 'rising sun'. Fin flashes on this aircraft were only on the outer faces of the fins, which was unusual. It seems reasonable to assume that the aircraft had originally been Olive Drab and Neutral Grey in finish. Another interesting feature is the under wing roundel. It would be interesting to hear from any readers who served on the Liberator squadrons and who may be able to tell us more about their individual markings.

dark grey under surfaces, which some machines retained until their demise. Indeed, some of the ex-SEAC Mk IIIs which were used after the war, by Transport Command squadrons based in Britain, still had American paint-work. Others are known to have been repainted with British paints, dark green and medium sea grey. Official directives indicate that there was even some mixing of the schemes, presumably because of the close association between the Americans and the British in SEAC.

Most long range Liberator operations were by day, but over Burma night raids were mounted, for which reason some Liberators had black under surfaces and sides in north European manner and wore red codes and serials. No definite ruling appears to have been adhered to with respect to the placing of the individual letters, but usually they appear to have been forward of the roundel. Usually the ball turret was removed from RAF Liberators as on KL629

(X aft) of 99 Squadron, a machine with black under surfaces. To hasten delivery the work SNAKE was applied aft of the serials on some Liberators passing through the Middle East to the Far East, but this seems to have been infrequently applied.

An interesting point is that for a limited period Liberator squadrons appear to have worn squadron code letters. EV902 of 355 Squadron is known to have worn the letters EG-S in September 1944 at which time EV910 was EG-F. When, and for how long, the aircraft were coded seems to have gone unrecorded. Perhaps some of our readers who served in India can shed some light upon this.

A counter attack in the Arakan peninsula was made by the Japanese in February, 1944. Their objective was to punch a path through the British Army in very difficult terrain and enter the gateway to India. But the Army held its position, and looked to the Vengeances of 82, 84 and 110 Squadrons, and Hurricanes, for

Continued on next page



Liberator VIII KP136 featured in the accompanying drawing has the SNAKE inscription and typifies the finish of Liberators in SEAC service. Rounded centres and fin flash sections are probably pale blue but could possibly be white.



Bombing Colours—continued

close support. In use at this time were Vengeances AN932:Q, AN959:K, AP105:U, EZ811:G and FP686:R all Mk 1s of 110 Squadron which was also using Mk 1As EZ862:Y and EZ901:P. Among those in use with 82 Squadron were AN615, AN701, AN737, EZ867 and EZ985.

In March the Japanese mounted a second phase to their offensive. There were weeks of fierce fighting before the enemy was routed. Fighters and light bombers maintained close support throughout the battles of Kohima and Imphal, by the end of which the monsoon season had broken again. The British Army nevertheless continued towards Mandalay and Rangoon, the weather becoming steadily worse, eventually forcing them to halt until the monsoon season was over.

By September Liberator VIs were serving with Nos 99, 159, 215, 355 and 356 Squadrons although not all of these were operational. No 99 Squadron for instance began using them when flying air-sea rescue patrols and made its first Liberator bombing raid on November 20. All except two of its operations are believed to have been in daylight. Targets for the Liberators in Burma became progressively fewer and a pattern of employment evolved that took them on some quite fantastic operations. Basically they had four tasks: the cutting at long range of the supply routes to Burma, destruction of supply and fuel depots in Burma and the adjacent territories, the halting of shipping coming to Rangoon, and on a number of occasions giving close support to British troops.

Between Bangkok and Moulmein lay some 5,000 miles of rail

**Below:** A line-up of Vengeances of 82 Squadron, EZ875:A nearest. Aircraft letter appears to be medium grey. Very small diameter fuselage roundel has traces of the previous larger roundel and its yellow surround. Camouflage pattern is similar on all aircraft. **Centre:** Vengeance EZ910 with quite large fuselage roundel which appears to retain a very narrow yellow outline. Traces of an underwing roundel are also visible. Camouflage tones well with the background. **Bottom:** A Liberator VI of 215 Squadron on finals. Note the black and white tail, grey/green finish, and inward sliding nosewheel doors which distinguish this version from the Mk VIII (Imperial War Museum photo).



Liberator squadrons in the Far East 1944-45 used distinguishing rudder markings as displayed by these Liberator B VIs: EW284 of No 215 Squadron with white horizontal bars on a black rudder, EW287 of No 355 Squadron with a rudder of black and white vertical stripes, and KH284 with a white diagonal cross on a black rudder. Photographs were taken after the aircraft had been withdrawn from service and were awaiting disposal at a dump in India (G. A. Cull photos via Bruce Robertson).

track involving the use of over 700 bridges, many built by British prisoners of war. These bridges were vital to the rail network and repeatedly hit in Liberator day raids. Being mainly of wood they were quickly repaired, the track likewise; labour for the Japanese was cheap—and expendable. Often the targets involved trips of over 1,000 miles and the load was about 3,000 lb. Careful fuel consumption tests were made and later the bomb load was pushed as high as 8,000 lb. Moulmein could be reached, Bangkok (a 2,200 mile trip), the Kra Isthmus—and even the Malay Peninsula, a journey of some 2,800 miles. To do this was the equivalent of bombers based in Britain making raids on North Africa from home bases. By early 1945 such lengthy trips were quite frequent for the Liberator crews, whilst 160 Squadron also operating Liberators concentrated on maritime duties. A number of close support operations with the army were also undertaken, but the targets were tiny and the raids difficult to mount. In the later stages of the campaign some use was made of primitive radio controlled bombs to strike bridges and small targets. For target photographs the Liberators were dependant upon deep reconnaissance sorties by Mosquitoes of 684 Squadron.

A little known squadron formed on November 8, 1944 was No 358 which operated Wellington Xs and Liberator VIs. It flew a few bomber sorties, then transferred to special duties and supply dropping. Its Wellingtons carried the squadron code TA and included TA-L:LN613 and TA-C:HF134. What seems to have been unique to this squadron were several Wellingtons each fitted with a dorsal gun position. Some of the Liberators, like others in use in this area late in the war, had natural metal finish with black individual letters only and black serials KG977 being 'L'.

By the start of 1945 Liberators of the bomber squadrons were wearing squadron identity markings on the tails of their aircraft. No 99's machine wore a white disc on a black fin, No 215's had black rudders bearing two white horizontal stripes, No 355's aircraft had white rudders with three vertical black stripes and No 356's wore black rudders with white X's.

Mosquito fighter-bombers served briefly for operational service with 27 Squadron from the end of 1943 into 1944, but were soon

The pictures on this page were held over from the last issue.

**Right:** Baltimore V FW 332 with an attractive nose motif and legend 'Redwing' plus ops tally. **Below right:** Marauder III of the Shandur OTU in green/grey with white lettering.



withdrawn. On February 29, 1944, LR250 arrived on 45 Squadron as its first aircraft, conversion being assisted using Bisleys, with the Vengeances leaving in March. A Conversion Unit, No 1672, had formed at Yellahanka to supply crews. No 82 Squadron began conversion on July 4 at Kolar although it was late 1944 before the Mosquitoes wearing Dark Green and Sea Grey Medium camouflage were ready for operations. Trouble really hit the Mosquito force on October 20, 1944, when a machine on a practice bomb run suffered major structural failure which caused all Mosquitoes to be grounded, the results of heat and moisture in the tropical climate. No 45 Squadron resumed operations in November and 82 Squadron began intruder sorties on December 19. Nos 84 and 110 Squadrons converted in 1945. Operations were concentrated over Burma, intruder flights often being made to targets of opportunity, with 47 Squadron joining the fray particularly at the end of the war.

During 1945 the re-conquest of Burma was undertaken on three fronts until Rangoon was captured and Burma fell. Plans were then made for the invasion of Malaya. Before this could come about, the first atomic bomb was detonated over Hiroshima and the mass destruction here, and later at Nagasaki led Japan to sue for peace. The war in the East was hard for all concerned, and relatively little photographic material has survived from that zone, so perhaps this is an apt moment to appeal to any who still have pictures from their days in the East to bring them forward for the many with historical interest in this theatre of the war.

After the war ended one task awaited the Liberators, the supply of food and medical supplies to those wretched souls who had been so callously treated by the indifferent Japanese. Like the large Dakota force, the Liberators were then engaged upon repatriation of POWs, assisted by many British based Liberators, ex-Coastal Command aircraft, quickly modified into transports for the Far East run.

BOMBER SQUADRONS IN THE FAR EAST 1943 - 45

Squadron	Equipment	Example	Notes
No 11	Blenheim IV	Z9654	Equipped with Hurricanes in August 1943
No 34	Blenheim V	BA616	Re-equipped with Hurricanes, first received August 1943
No 42	Blenheim	AZ997:S	Re-equipped with Hurricanes, first received 18.10.43
No 45	Vengeance IA, II Mosquito VI	AN656:H HP881	Began operations 8.43. Mosquito re-equipment began 2.44. Aircraft used included HR291, HP941, LR306, LR307
No 47	Mosquito VI		Received 2.45; possibly coded KU
No 60	Blenheim IV	V5587	In use 3.43. Re-equipped with Hurricanes 8.43
No 82	Vengeance I, IA, II, III	FB975-B (III)	Mosquito conversion began July 1944. FB975 in use 5.44
No 84	Mosquito VI Vengeance I, IA, II, III	HR557:M FD105:U	In use 5.45 Mosquito introduced 11.44; soon withdrawn. Vengeance served 12.42 to 1.45
	Mosquito VI Blenheim V Mosquito VI	RF698:C EH354 HR526:PY-B	Re-introduced 2.45 Used during conversion In use at the end of the war; silver finish, black codes
No 99	Wellington X Liberator VI	HZ720:G KG976:L	In use 2.44 In use 12.44

Squadron	Equipment	Example	Notes
No 110	Vengeance I, IA, II, III, IV Mosquito VI	FP686:R HR620:P	In use 12.43 Re-equipped 11.44, example given in use 4.45
No 113	Blenheim V	AZ942	Last Blenheim operation 15.8.43; Hurricane received 9.43
No 159	Liberator II, III, VI, VIII	EV966 (VI) KN812 (VIII)	Mk VIII externally identifiable by outward opening nosewheel doors
No 215	Wellington X Liberator VI Liberator VIII	HE957:V EW284:Q KH372:H	Grey-green finish 'Silver' finish
No 355	Liberator III Liberator VI Liberator VIII	BZ955:F EW245:D KN774:Q	Mk III used 10.43 - 4.44 Mk VI in use 3.44 - 9.45 'Natural' finish. Others used included KP136:P
No 356	Liberator VI	KL611:W	Used 1.44 - 11.45; example with green/black finish
No 358	Wellington X Liberator GR.VI	KH119:S HF134:TA-C KG866:M	Green/grey finish Wellingtons coded, Liberators uncoded. 'M' had 'natural' finish

Other units in the Theatre using bombers included No 1 AGS equipped with Liberators including A:EV909, H:EV975, J:EW259, C:KG889.

Michael J. F. Bowyer



SAAF Dakota — from page 442

44 Sqn Dakotas also were seen to have 'lost' their fin serials. Unlike the more glamorous fighters and bombers, the work of the Dakota has not appeared much in print. However, Daks received much publicity from time to time in the years gone by. For example, Dakota 6879 assisted flood relief work in April 1961 by dropping supplies in the Patensie area while, from January 17, 1969, SAAF Dakotas flew food into Lesotho during the drought in that country.

In addition to the various units mentioned before, 28 Sqn's VIP flight became a separate unit some time ago, becoming 21 Sqn. Also recently formed was the Multi-Engine Conversion Unit at Bloemfontein. These, plus 44 Sqn, 25 Sqn and Ysterplaat Station flight, incidentally the last to have had a Dakota (6879) in dayglo finish, are the aircraft units operating Daks.

One of the SSA Dakotas, ZS-DJX, was transferred back to the SAAF as 6885 in 1967. The aircraft, a C-47A-15-DK c/n 12596, was previously SAAF 6835, RAF KG484 and USAAF 42-92760. The remaining SAAF Daks returned to the SAAF in February 1971, ie, (SAAF serials in brackets) ZS-BXF (6888), BXG (6887), BXI (6886) and DJB (6889), all with 44 Sqn. The latest c/s change on SAAF Daks has been the addition of a blue fin band on 25 Sqn Daks, first seen in July 1970.



an OO linear scale of 4 mm to 1 foot. Movement scale for tanks is given as 20 miles on roads, 20 miles cross-country. Why? Tanks can go a lot faster on roads than cross-country.

However, apart from these gripes, the book is of interest, if only to disagree with and to improve upon; which should make it a good favourite as a small present for someone just beginning to be interested in the hobby.

**Panzer-Grenadiers.**  
**Halbkettenfahrzeuge (half-tracks).**  
Almark Publishing Co Ltd,  
270 Burlington Road, New Malden,  
Surrey.  
50p each.

THESE are two additions to the Almark 'Wehrmacht Illustrated' series dealing with aspects of the German forces in World War 2. *Panzer-Grenadiers* usefully gives pictures, tactics, weapons, and uniform details, all of value to model soldier and uniform fans. There are 5 pages of colour art showing uniform styles. *Halbkettenfahrzeuge* gives a handy guide to all the types of German half-track with over 70 illustrations. Coverage in this small book is very comprehensive for its size.

## AVIATION

**British Isles Airfield Guide**  
Merseyside Society of Aviation Enthusiasts,  
11 Leybourne Grove, Liverpool L25 455.  
40p.

THIS is the most complete guide of UK airfields ever to be published. It contains in 35 pages full lists of all active and disused civil and military airfields, together with details of geographical locations (latitude and longitude), brief details of the aerodrome operator, current activities (types of aircraft based there), length of runway, type of runway surface and approximate locations of airfields in relation to the nearest road.

Also included are aerodrome ground signals, navigational aids and air traffic control details. The disused airfield section is intended as a source for all those interested in airfield histories, and is given in alphabetical order. All airfields used since 1930 are covered.

This guide is absolutely essential for roving enthusiasts and no car should be without one! The seven pages of maps depict over a thousand indexed airfields, gliding centres and bombing ranges from Land's End to Ross and Cromarty! The volume is well printed in a handy A5 size.

**Danish Military Aviation.**  
Stoppel.  
G. L. Kongevej 154, DK 1850,  
Copenhagen V, Denmark.  
£1.95.

DANISH military aviation, like so many other NATO air forces, makes an interesting subject for study. At the same time the growth of the enthusiasts' movements throughout Europe has now reached adequate proportions and is reflected in the increasing number of books being published in Germany, Holland, France and now Denmark illustrating national aviation history and commenting on contemporary matters.



Above: A selection of the Miniature Figurines castings reviewed but not illustrated in the last issue. The Duke of Wellington in top hat and coat and the French infantryman waving his shako are among the models shown.

DanMil is published by Denmark's leading model shop, Stoppel-Hobby, who have in the past set high standards in transfer design and manufacture, supplementing markings available in plastic aircraft kits. They intend to publish three issues of the book each year which will aim to enlarge the general interest in historical and contemporary military aviation in Denmark and elsewhere.

In the first issue the standards of both articles, illustrations and line drawings are very high. The main feature story is on the development of the RDanAF transport squadron No 721 which early in its career used Heinkel floatplanes in Greenland. The other main feature is a photographic one on the T-33 trainer in Danish service. Here, apart from some excellent pictures, 1:72 scale plans of the aircraft are given in considerable detail. The work is well above average and will provide an extremely valuable source not only of the T-33 itself but of the many variations of colour scheme seen on this aircraft. Elsewhere there are many pictures of aircraft in present day RDanAF service all shown in a size suitable for the model maker and historian alike.

Judging by the credits on the pictures and text the Danes have a number of very knowledgeable people working for this new publication. Photographer Af Blume, artist Ole Rossel, and writer Af O. Nikolajsen stand out as being names which we will obviously hear of again.

**McDonnell-Douglas A-4 Skyhawk.**  
**Nakajima Ki 84 Hayate.**  
Compiled by Richard Ward/Richard M. Buesschal.  
Osprey Publishing Ltd, 707 Oxford Road,  
Reading, Berks.  
£1.25 each.

TWO more in the Aircam series, these follow the usual format with brief introductory texts, dozens of pictures, and eight pages of colour views. As seems to be customary with books on Japanese aircraft, the Hayate book has a few rather hazy pictures. Both books offer modellers a host of ideas for colour finishes.

**Squadrons of the RAF and FAA.**  
**British Airline Fleets.**  
AVSOC Publications, C. R. Sheppard,  
Searle House, Searle Road,  
Farnham, Surrey.  
10p each.

THESE two booklets will prove extremely useful for quick reference purposes by enthusiasts and modellers alike. Both are dated January 1972. The airline guide will appeal to spotters as it covers all UK-registered airlines, fleet by fleet. The military booklet reflects the ever-diminishing numbers of squadrons in Britain's armed forces and is frightening as well as accurate! Although there have been a few operational changes since January the guide is worth having as it contains the information that usually takes most enthusiasts ages to find in magazine back-numbers!

## RAILWAY

**Brunel and after: the Romance of the Great Western Railway.**  
Archibald Williams.  
Patrick Stephens Ltd, 9 Ely Place,  
London EC1.  
£2.

AS THE title suggests, the book's contents fall into two sections, the first part describing the uphill climb of the Great Western's infancy, and the second part the smoother run with developing techniques, comfort and range, following the passing of Brunel and of the broad gauge. The author tells this stirring tale in a lucid and lively style, revealing the dignity and courage which this famous railway showed throughout its turbulent career, how it overcame its failures and how it grew to be the most famous in the British Isles. This is a companion volume to the GWR 'Boys of All Ages' series of the 1920s and 1930s.

A special feature is a two-colour gatefold map, showing the entire GWR network as it was in 1925 both on land and sea. This is an excellent, nostalgic book for railway fans.

## GENERAL

**Scale Models in Balsa.**  
A. M. Colbridge.  
Arthur Barker Ltd, 5 Winsley Street,  
London W1.  
£1.75.

IN some 120 pages this book gives a fairly basic but competent coverage of its subject, not going into immense detail, but quite useful for anyone new to modelling. Chapters cover solid scale and flying aircraft, ships, bridges, buildings, and so on. The chapters on ships and bridges seem the most instructive of all. Working techniques for balsa generally are well covered in the second chapter, while another chapter shows how to work from plans. We would not agree with the author that plastic kits are just assembly jobs and that they've 'taken the craftsmanship out of scale modelling'; a lot of modellers change basic plastic kits beyond recognition as any visit to an IPMS meeting shows. The book is well illustrated with drawings but would have been greatly enhanced by pictures of some actual models—some drawings which appear to be from old kit boxes are the nearest the book gets to this.

**IMPERIAL WAR MUSEUM**  
The Imperial War Museum Photographic Library will be closed to the public from April 17 to June 5 while redecorating is in progress. Postal orders will still be accepted during that period so long as negative numbers are quoted.



Above: Prince Henry Vauxhall converted to a 1914-18 Staff Car with suitable figures from the Airfix Motor Racing Spectators set and the passengers from the 'B' Type Bus.

the modeller who works to 54 mm scale or thereabouts, to see one subject 'done to death' whilst another is completely unrepresented.

However, and without doubt, the military modelling hobby is better served now than at any time in the past, and most manufacturers do, wherever it is practical, take note of the preferences and requirements of enthusiasts. From time to time a real gem appears to fill a gap, and such a piece is the 'Prince Henry' Vauxhall touring-car recently issued in 1:32 (54 mm) scale by Airfix Ltd.

I have already described in an article a month or so ago how at the commencement of the 1914-18 war the British Army was woefully short of motor transport, and how large numbers of civilian commercial vehicles were taken into military service. Quantities of saloon, touring, and sporting motor cars were also acquired, some by gift of the owners, some by purchase, and others by impressment, and these were employed mainly as staff cars or as scouting vehicles, some of them being converted

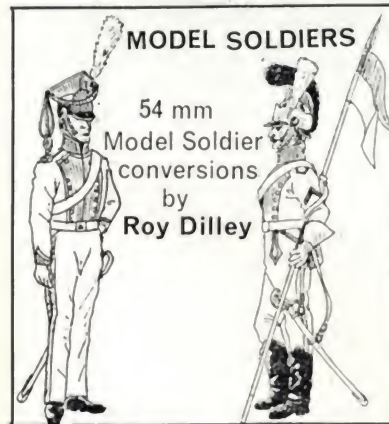
into armoured cars by the addition of steel-plate hulls. Permanent fame was achieved by some of these vehicles, such as the Rolls-Royce Silver Ghost; others were less successful, but for the most part they served the Army well, considering the fact that they were not built for military purposes. They helped to lay the foundations of technique and experience upon which the mechanized armies of later years could be soundly based.

The 'Prince Henry' Vauxhall, named after the Prince Henry car trials in Germany, was a sturdy, reliable sports-touring car, admirably suited to the staff car role to which it was committed by the Army. It coped easily with the indifferent roads of Northern France, Belgium, and the Middle East, and together with other sporting cars provided fast and comfortable transportation.

Airfix's model captures the businesslike appearance of the prototype very well, and can be used to advantage in scenes or dioramas of the 1914-18 period.

In assembling the model I followed the kit instructions exactly, painting many of the parts before cementing them together to ensure the best possible result. As a

Continued on page 455



ONE of the more unfortunate aspects of modern model manufacturing policies from the enthusiast's point of view is the way in which some subjects receive intensive coverage whilst others are virtually ignored. Models of the Napoleonic era and of World War 2 subjects are now plentiful. The American Civil War is well covered, as is the Roman Empire, but what of the Great War of 1914-1918, the Crimean War, or the many other campaigns large and small that marked the progress of the eighteenth and nineteenth centuries? A few manufacturers have produced odd items or small ranges to represent these periods, but by and large the enthusiast must convert or build from scratch where he wishes to achieve a comprehensive coverage.

It all turns on economics of course, and potential markets, for obviously a business must be economically viable or fail, but it can be rather depressing, particularly for

Right: Drawings show front and side views of the Staff Officer figure converted from Airfix spectator. As can be seen it is basically a simple carving and filing job, taking special care shaping the waist at the back. Use a disc of plastic card and plastic putty to build up crown of hat. Programme seller is similarly treated to provide the second officer.



Right: A close view of the two standing officers, seated officer and ASC driver all made from 'rigid' plastic pieces. Below: Typical grouping of the pieces; these are even more enhanced in a suitable scenic setting.





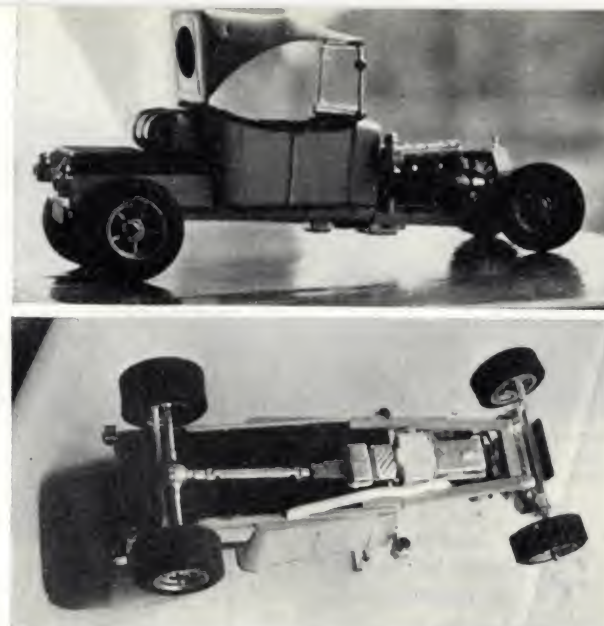
# FORD HOT ROD

## BUILDING A MODEL HOT ROD USING THE AIRFIX MODEL T FORD

By MARTIN DE'ATH

**H**OT Rodding started in the USA just after the Second World War when young ex-GIs straight out of the services, bored with their civilian jobs, started buying old cars, stripping them down to make them lighter and tuning the engines to make them go faster. This caused a lot of rivalry between these young men, who had become known as Hot Rodders, leading to unlawful races along public roads and the use of traffic lights as drag strips. This became so bad that the authorities and the Hot Rodders got together and formed the various Hot Rod and Drag Racing Clubs throughout the USA. The authorities provided dis-used airfields for conversion into Drag Strips so the Hot Rodders could have races without endangering other people's lives. During the 'fifties and 'sixties, hundreds of these clubs and drag strips sprang up all over the USA, and nowadays drag racing is very big business, second only as a spectator sport to baseball.

In Britain, Drag Racing and Hot Rodding have only become popular in the last five or six years, but are on the increase. British Hot Rods look a bit different from their American counterparts, mainly due to the different traffic laws and also, of course, the uncertain British weather. Still, this has not stopped some people, who have built very good and practical Hot Rods.



**Top:** Completed model in yellow with black interior, blue top and brass fittings. **Above:** Underside of model showing new engine and modified axles.

The basic component of this conversion is an Airfix 1912 Model T Ford modified in the following way.

### Stage 1—Body and Chassis

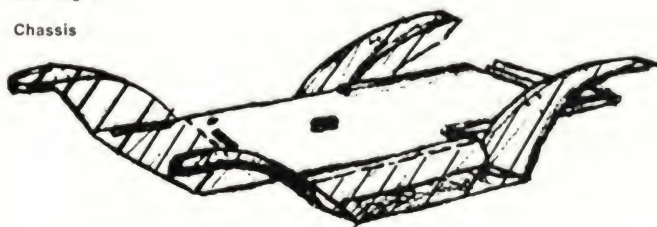
The body and chassis are assembled as in the kit instructions, leaving out part Nos 1, 4, 9, 10, 11, 16, 17 and 18. Put aside part Nos 6, 15, 19 and 20 as these will be needed later on. When the body/chassis is dry, using a fretsaw, cut off the mudguards on the line shown in drawing A. Also remove the front of the chassis directly in front of the firewall.

Next, the flat back effect is made by sheeting the sides of part Nos 12 and 13. Several pieces of plastic card are cemented together to form the top of the flat back, part No 15 can then be cemented on so as to make a slightly raised platform. Make the front chassis members from 1/4 inch square plastic sprue (Drawing B). The length of this depends on what engine is used; my drawings will suit the Airfix Jaguar engine. If the Jaguar engine is chosen, the firewall and chassis will have to be modified to

Drawings not to scale remove shaded portions

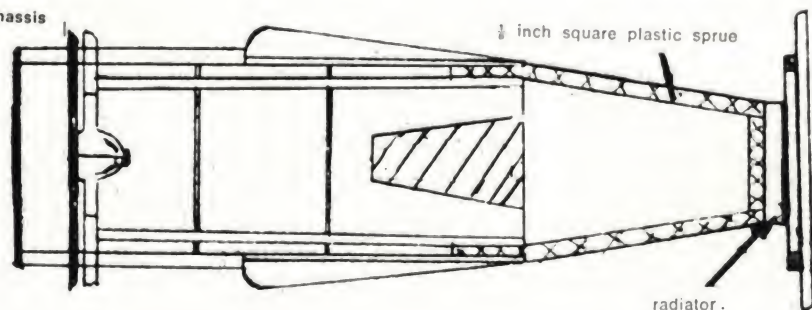
Drawing A

Chassis

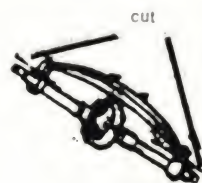


Drawing B

Front Chassis



Front and rear suspensions



Drawing C



Drawing D

radiator.



clear the engine gearbox and bell housing, engine mountings will also have to be fabricated from scrap.

### Stage 2—Front and Rear Axles

These are from the basic Model T kit but are modified in the following way. First, the rear axle: Cut the spring off and re-cement it in front of the diff unit, having first filed a flat on the diff unit, this lowers the rear. Then cement to chassis as per instructions. The front axle and suspensions are modified as follows: Cut the headlamp brackets off and keep them safe. Then remove the spring and re-cement it behind the axle (Drawings C and D). This lowers the front. Wheels and tyres are from the Ford 3 litre kit with the addition of part Nos 24, 25, 29 and 30 from the Model T Ford.

### Stage 3—Finishing Details

Headlights, tail lights, sidelights and radiator are from the Model T kit. Interior is made up using the steering wheel, gear-change lever, and pedals from the Airfix Mini. The standard bench seat is kept, with the addition of seat belts. The Jaguar

engine (if used) is left in situ with the addition of a pancake air filter made from plastic card. The prop shaft has to be shortened, and the exhaust adjusted to suit. The windscreen is shortened just above the stays and replaced by a piece of plastic sprue. The soft top is first shortened from the front up to the windscreen locating channel and then shaped. Cut a different shaped hole in the back for the rear window (diamond, round, etc) and the sides are filed down to give it a more modern look.

### Stage 4—Painting

My model is coloured a bright yellow with black interior and a blue soft top. The wheels and lights, radiator, and parts of the engine are done in brass colour which sets the whole model off beautifully.

**Left:** View of model with soft top fitted and Jaguar engine clearly shown. **Below:** Model with soft top removed. Note new wheels taken from the Ford 3 Litre kit.



## Model Soldiers—from page 453

finishing touch, and to disguise the rather heavy moulding of the spokes in the wire wheels, I added 'canvas' wheel covers, made from discs of tissue-paper cut to the required diameter and attached firmly to the wheels. This was done by laying the paper discs directly on to the spokes and brushing on liquid cement, which soaked through the paper and made a secure bond. It is advisable to paint the wheels completely before attaching the covers, then just scrape the paint off the extreme outside surfaces of the spokes so that the tissue is applied on to bare plastic. Covers of this type were frequently fitted to the real cars, so the modification is quite authentic.

Tyres should be painted dark grey, not

dead black, and it is permissible to use a sort of buff colour since some tyres issued were of this hue. Muddy or dusty effects can be applied to suit the individual modeller's taste, but it is worth remembering that staff-cars tended not to be used in the extreme forward areas, where the roads had been broken up by shell-fire and the incessant pounding of the heavy steel-rimmed wheels of guns and wagons.

The figures shown in the illustrations are representative of staff officers and a driver of the period. All have been converted from Airfix hard plastic kit figures and the Motor Ace set. Both seated figures were made from the seated passenger with folded arms included in the 'B' Type Bus Kit, with the

civilian clothes suitably trimmed to represent uniform, and the head replaced with that of the driver. The 'Old Bill' Bus kit also contains several seated figures of soldiers, and these can be similarly converted and adapted to give a number of attitude variations if desired.

Readers of an earlier article of mine published some two years ago, will remember the stout officer in the British Warm overcoat. He was made from the duffel-coated spectator in the Motor Ace figure set, with the coat carved and sanded to shape, the cap built up, and the trouser legs smoothed down to represent riding boots. A similar series of operations was carried out on the programme seller in the same set, resulting in the other standing officer.

Posed against an authentic background, this little group combining vehicle and figures can be very effective. Your own imaginations and experiments will enable you to come up with many variations.

Colour details for the 'Prince Henry' Vauxhall are as follows. Body and chassis: Khaki or Service Grey. WD No.: White. Upholstery: Dark Brown (semi-matt to depict leather). Running board inserts: Dark Grey. Canvas wheel covers: Khaki.

**Left:** For photographic purposes the two seated figures have been placed on the running board; they should, of course, be seated in the vehicle. Note that if the officer is to ride in the rear seat his legs will have to be shortened to fit.



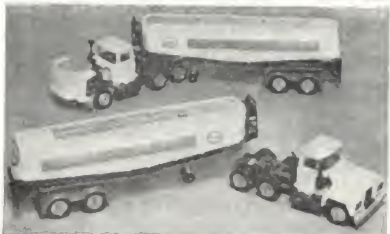






## New Kits—continued

tions made to the basic kit to fit it to the insignia. Much thought has gone into the production of these two sheets and there is no doubt that yet again Modeldecals have shown how this type of product should not only be displayed but packaged and provided with instruction sheets. Both sheets cost 38p each plus postage and can be obtained only from Modeltoys, 246 Kingston Road, Portsmouth, by direct mail. *A.W.H.*



**Above:** Four new releases from Corgi are the Super Mack Tanker, useful as an O gauge accessory, Volvo P 1800, Porsche 917 and an AMF Ski-Daddler Snowmobile and Trailer. Prices are respectively £1.35, 16p, 16p, and 32p.

### Polly S: water soluble model paint

**PAINTING** is perhaps the most important single step in model making. A poor paint job can ruin an otherwise perfect model while a good paint finish can make even an indifferent model look reasonably presentable. Most modellers, particularly railway modellers, will be familiar with the Floquil range of paints and the excellent finish they give. These paints require special Dio Sol thinner for thinning and for cleaning brushes, etc. When painting plastics care is necessary in application to avoid crazing of the surface; alternatively Floquil Barrier can be painted on prior to applying the Floquil paint.

Now the makers of Floquil have developed a new paint which has the same excellent qualities but which is water soluble! The range includes 13 railroad (US) colours, 25 general purpose colours, and a selection of military colours. These paints can be used on plastic, card, wood, etc. on plaster scenery, and on metal after priming. We can highly recommend these paints as being very convenient to use and giving an excellent finish.

Victors, 75 Chapel Market, Islington, London, N1 9ER, supplied our samples and have the whole range in stock. Railroad colours are 34p per 1 oz. bottle. General colours, 22p per 1 oz. bottle. Colour cards with actual paint samples are available from Victors for each selection of colours, on receipt of a SAE. *M.A.*

### Midori: 'Sea Gull' yacht

**THE** *Sea Gull* is a kit based upon a Bermudian rigged ocean racer similar to those used in the Fastnet races and similar competitions. The overall length of the model is 10 inches with a mast height of 9½ inches, which appears to give a scale of 1:45.

The parts are moulded in white, brown, chromed and brass finish plastic and are all numbered. Included is a small electric motor, propeller and shaft, also cement, lubricating grease and thread for rigging. The plastic sails are not of the usual preformed variety but are almost the texture of cloth. The hull is formed in one piece with separate rudders and lead keel plate. Provision is made to box in the apertures in the hull for keel and prop shaft after fitting. On our sample it was found necessary to fit a rubber gland for the propshaft to keep the boat watertight.

The instruction sheet's illustrations are quite clear and should present little difficulty. We departed from them only in fitting the deck to the hull before rigging. The motor switch located in the cockpit is ingeniously controlled by the steering wheel.

This *Sea Gull* will sail in two inches of water but is rather fast for her size under power; possibly a small resistance in the battery lead would be the answer. The complete cockpit is detachable for battery changing (one pen cell, not supplied) so one must be careful not to get the deck awash. If you sail her in the bath the elements can be controlled. A little painting, using the box lid as a guide will improve the looks of this little yacht.

Our kit came from Riko Ltd, 13-15a High Street, Hemel Hempstead, Herts, who are the sole importers, and the price is 64p. *B.L.*

### Atlas: O gauge trains

**AS** mentioned last issue, yet another manufacturer has joined in the modern revival of O gauge, this time Roco, the Minitanks people, who are producing models under the 'Atlas' trade mark. The range is based on American prototypes for this, like it or not, is where the main market is for these large scale (1:48) models.

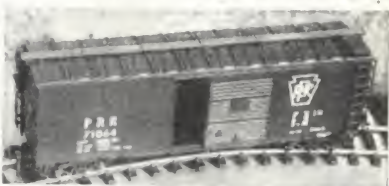
The sole locomotive available as yet is the ubiquitous F-9 EMD 'covered wagon' diesel, sold in the liveries of four famous railroads, C & O, Union Pacific, ATSF, and Burlington Northern. We



**Above:** O gauge F-9 EMD 'covered wagon' diesel finished in Santa Fe livery.

had this locomotive for tests and found it to be a most impressive piece of model engineering. The one-piece body shell is sharply detailed and well painted, though the nose 'flash' transfer on our sample did not adhere well. The body is a snap-fit on to the chassis with small lugs to secure it (these are a possible weak point—one snapped off on

our sample, so care is needed when removing the body). A lead weight in the fuel tank position gives the model good ballast. The motor is a sealed five-pole unit with a nicely engineered flexible drive to the two bogies, as cleverly arranged as any we've seen. The locomotive obviously had great



**Above:** 40 ft box car comes with sliding doors.

pulling power—it ran away effortlessly with everything we loaded on it. A pleasant feature (to us at least) is the very realistic 'roar' of the motor which gives an excellent impression of a hard-working diesel engine.

The headlight and number boxes are illuminated in the usual way. Checked out against a scale drawing the model proves extremely accurate. Windscreen



*Atlas 50 ft gondola, O gauge.*

wipers, air hoses, and one or two small handrails are the only missing details we could find, and these can easily be added by 'super-detail' fans. For such a good quality product the model is an excellent buy at £9.25, very inexpensive for an O gauge model locomotive.

Atlas also produce a range of American freight cars, including a 50 ft. gondola, a 40 ft. box car, a stock car, a plug-door car and caboose. These models are available in up to six different rail-



*Atlas 'steel' type caboose in O gauge.*

road finishes. The detail is exceptional as might be expected from the Minitank makers. Each car has a separate underframe, which is a dummy in its own right complete with dummy brake rigging and all other detail, most of it not visible from the usual viewing aspect. Separate detachable bodies plug on to the chassis. Price of these models is £1.65 each, again good value for the fine quality offered. The one drawback is the coarse Triang type wheels which have deep flanges. These foul the fixings and sleepers of Rivarossi O gauge track, though they pass over Peco 'bull-head' type track. So if you use Rivarossi track you'll need to file down the wheel flanges slightly, an easy enough job we found. The locomotive, incidentally, already comes with finer flanges. Coupling is the 'horn hook' type,

AIRFIX magazine

though more compact than Rivarossi's similar type and not readily compatible. The two types will join up by hand, however.

Summing up this is an excellent range of models for anyone wishing to try O gauge. The models run most smoothly and impressively. Riko are the importers and the Beatties shops in London, Leeds and Manchester all stock the range. Mail orders can be placed through Beatties' main London shop, 112 Holborn, London, WC1, allowing sufficient in the remittance to cover post and packing. *C.O.E.*

### Modakit: 1:76 scale tank kits

**L**ATEST releases received from Modakit are two 1:76 scale tank kits. Kit AFV 01 contains mouldings for two World War 1 A7V tanks and permutations of the parts enables the modeller to choose from *Elfriede, Hagan, Wotan* or *Schnuck*. At 50p plus postage this kit is excellent value, though probably not for the absolute beginner. 'Traditional' scratch building construction methods are followed, the parts being moulded on thin plastic sheet, thus preserving the crisp detail of rivets, etc., while a blank moulding of the hull shape is included as a basis on which to build and to give rigidity to the structure. It is therefore only necessary to cut out the individual sides and ends, chamfer the edges to be joined, and then cement these together using liquid cement. Do take care here as the parts are thin and too much cement can spoil them. We found that narrow strips of Sellotape were ideal to hold the corners in place, in fact the top, two sides and one end only were all held together this way, cement brushed into the inside corners, and



**Above:** Unpainted model of the Modakit A7V.

then when dry the hull blank was inserted with the final end being added last. Carefully made, this kit does capture most effectively the crisp corners and the bulky look of the A7V.

Second in the series is kit AFV 02 and the cost of this is slightly more at 60p. However it again contains mouldings for two models, this time of World War 2, the PzKpfw 38(t) and the Jagdpanzer Hetzer. As in the A7V kit the rivet detail, etc., is excellent and the models are again built up from separate parts on to basic hull mouldings. Wheels are made from two moulded halves cut from the sheet with a plain disc sandwiched between. Strips of sheet plastic are included for these discs as are rods for axles and gun barrels, etc. The main snag with vacuum moulded kits is that detail can only be 'one sided' but the manufacturers have overcome this drawback in the case of the track-work by moulding it in two parts.

Strips of 'teeth' are cemented inside track plates and again the thin plastic ensures excellent detail, although care will obviously be required when shaping this to go round the sprockets and idlers. Congratulations to Modakit for their original approach, which deserves to be successful, these kits, although requiring a lot of work, are both a challenge and a delight to construct. *G.S.*

### SOES: Trolleybus kit

**ALTHOUGH** there are now many kits for model buses and several for tramcars in 4 mm scale the first trolleybus kit we've heard of has only recently been marketed. This kit for a 6 wheel Rotherham trolleybus has been produced by the Sheffield Omnibus Enthusiasts Society in a limited run of only 500 kits. Once all these are sold no more will be manufactured but instead a different class of vehicle will be introduced.

As shown in the photo the kit consists of moulded transparent plastic body parts, including upper and lower floors complete with seats, wheels, tyres and axles, and trolley pole parts. The



**Above:** Basic mouldings for the SOES Trolleybus kit.

mouldings are neatly made and fit together quite well. Thus, much of the basic and rather tedious construction work is already done leaving the modeller free to concentrate on detailing and painting.

We would not recommend the kit for the beginner but the modeller with some experience who is prepared to take time and care in the painting and detailing could produce an attractive model with much less work than by building completely from scratch. The kit includes instructions but not a plan. It costs £1.10 including postage and packing, from the Sheffield Omnibus Enthusiasts Society, Secretary, D. E. Vickers, 144 Steade Road, Sheffield, S7 1DU. *M.A.*

### Airmodel: Dornier 18 and 27

**THE** German Airmodel company has produced three new models recently. These are a complete Dornier Do 18 flying boat and a Dornier Do 27 communications type at present in service, plus a conversion kit to turn the Frog Vampire into a two-seat night-fighter or trainer.

All are produced by vacuum forming but the plastic used is thick enough to allow the fuselage and wing halves of both kits to be stuck together in rather the same way as a normal injection moulded sample. The Vampire is similarly moulded and provides the fuselage and canopy for the two-seat versions of this aircraft.

In the latter there is much work to be done if the modeller wishes to convert the existing kit into the trainer



**Above, top to bottom:** Civilian version of the Do 18, military version of the Do 18, and Dornier 27, all by Airmodel.

version. Apart from the new fuselage, the fins and rudders have to be altered. This can be a major undertaking and it is inadvisable for the more junior model maker to try it.

On the other hand we found both the flying boat and the communications aircraft fairly easy to construct. The Do 27 is one of the most interesting to make as there are many versions that can be built from the basic parts. Floats are provided and there are several civil versions suggested in the instruction sheet. The canopy which may have been a source of trouble has been very carefully thought out. It covers more than the actual glazed area on the completed model, but this is to advantage as one is able to rub down the joint lines after they have been filled with body putty so that there is no apparent join between the cockpit and the fuselage.

Similar ingenuity has been shown in the Do 18. Here both the radial engined Do 18L and the D. F and G versions have been provided so that the individual can make up any of the versions of this flying boat he fancies. Both civil and military variants are included and although the kit costs £1.50 there is sufficient in it to make the expenditure well worth while.

In all three models described the instruction sheets are adequate. Those in the case of the Do 18 are best and the manufacturer has provided detailed 1:72 scale drawings showing camouflage details and a complete constructional drawing to match the large number of parts in the kit. These three models are without doubt the best that have come from Airmodel in almost their entire series and the manufacturers are to be congratulated on producing a first class product. *A.W.H.*

Jones Bros. 56 Turnham Green Terrace, Chiswick, London W4, have sent us two Falter publications. First is the Falter catalogue, illustrating in colour the whole range of kits. These include 1:100 scale aircraft and roadway items as well as buildings. Price 15p. Second is 'Scenic Modelling Made Easy', a complete guide to scenic work using Falter material, and well illustrated in colour. Price 75p. Both books should interest wargamers as well as railway modellers.



# Letters to the Editor

## Aircraft Identified

YOU may be interested to know that the Mosquito and Wellington, shown in the January 'Photopage', are wearing Flying Training Command 'F' codes.

201 AFS had the code 'FMA' and used Wellington T10's and Tiger Moth T2's. It also used the code 'FMB' on some of its Wellingtons.

The code 'FMO' belongs to 204 AFS, which used the Mosquito T3, FB6 and Tiger Moth T2.

P. Munro, Dunstable, Bedfordshire.

## Viscount Appeal

WHAT a splendid record has been chalked up by the Vickers Viscount airliner, which has now passed the magnificent milestone of ten million hours in the air. As the world's first turbo-prop airliner, it did more than any other to introduce the high standards of reliability and passenger comfort we now take for granted with turbine air travel today.

A project is now under way to secure for all time a fitting memento of this remarkable achievement. The Viscount type 701 G-ALWF, second production Viscount to be built and the oldest surviving example of its type, is scheduled to go on permanent public display at Liverpool (Speke) Airport. This aircraft initially flew on December 3, 1952, and after serving with BEA for ten years went on to operate in the colours of Channel Airways and British Eagle before passing to its current



The Viscount 701 G-ALWF on turnaround at Ronaldsway Airport, Isle of Man, in the summer of 1970 (A. J. Brown).

owner, Cambrian Airways, in December, 1965. G-ALWF flew its last revenue service on Christmas Eve, 1971. Liverpool Airport was chosen as a final resting place for this aircraft on account of its ease of public access, strong association with Cambrian Airways and the assurance of plenty of willing and experienced help on hand to keep G-ALWF in good (non-flying) condition.

This will be the first time that a complex post-war airliner has been preserved for public display in the United Kingdom, and a more appropriate tribute to the British aircraft industry could not have been chosen.

An appeal fund has just been launched to raise the finance necessary to secure G-ALWF for preservation at Liverpool. About £5,000 will be

## CONTRIBUTIONS

Letters to the Editor selected for publication entitle the senders to each receive a free Airfix plastic construction kit, and the publication of photographs from readers is similarly rewarded. Airfix Products Ltd award the kits on the following scale:

ONE letter or photograph published is rewarded by any kit from Series 1-6 inclusive. For TWO letters or photographs any one kit up to and including Series 9 can be chosen, or alternatively two kits up to Series 6. For THREE separate contributions (eg. photographs) the entitlement is one kit up to Series 12 or three kits up to Series 6. Readers can make their choice on the special card which we send out after publication. The kits are supplied direct by Airfix Products Ltd.

We receive a large volume of mail from readers; all letters are read and we answer or acknowledge as many as possible provided that a SAE or stamp is included for reply. The Editor cannot accept responsibility for safe keeping of contributions though every care is taken. Opinions expressed by correspondents on this page are their own and do not necessarily reflect the views of the Editor or Airfix Products Ltd.

needed to acquire the Viscount and make arrangements for its display. The aircraft will then effectively be handed over on semi-permanent loan to the Liverpool Corporation.

I am sure that many readers will wish to contribute to this fund, thus helping to make possible the preservation of the Viscount G-ALWF. Any donations, however small, will be gratefully welcomed, and all will receive individual acknowledgement. Please make cheques or postal orders (crossed) payable to 'Viscount Preservation Fund', and send them to: Viscount Preservation, 17 Portsmouth Road, Thames Ditton, Surrey.

P. St. John Turner, Bassett, Southampton.

## Bombing Colours

IT IS always a pleasure, eagerly anticipated, to read a new issue of *Airfix Magazine*, but I regret to say that in the case of the issue for February 1972 the pleasure was somewhat marred by two or three errors in the instalment of 'Bombing Colours', which I feel a little extra care could have avoided.

For instance, the 492 bombers lost in the series of night raids on Berlin in the winter of 1943-44, if placed wing tip-to-wing tip would have stretched 49,000 feet (about 9.5 miles), not 95 miles. The losses no doubt seem grim today, but whether measured in relation to the number of sorties flown or the number of raids carried out they were within quite acceptable limits and it would be a pity if this were to be lost sight of through exaggeration founded on carelessness.

Then again, it may well be that taking an average of seven men per crew the loss of personnel on the 2,824

aircraft missing in operations in the twelve months from March 1943 could have amounted to almost 20,000 but it is quite wrong to say that number were killed, to do so is to fail to take account of the not inconsiderable number who survived the destruction of their aircraft to be taken prisoner.

Also, there is evidently something wrong with the caption to the heading photograph. It is stated to wear the markings of 1661 CU but later to have passed to the same unit.

Lastly the interesting contrast referred to in the captions to the photographs at the foot of page 336 eludes me. If the interest of the photograph of Lancaster LM 326 is the narrow stroke of the squadron code letters, the point is hardly made by contrasting it with an aircraft with no codes at all. If the point is the presence in one and the absence in the other of fuselage windows then it would have been more appropriately taken in Part 32, where over-painting of windows is referred to.

P. H. Pimblett, Brooklands, Sale, Cheshire.

## Diorama Details

I HAVE personally and through the medium of my studio been one of several associated with Artwork, Leaflets, Projects, etc., for Airfix Products over the past 10 years or so.

In this capacity I constructed a diorama for Airfix 1:32 scale German Infantry for Toy Fair display.

I was therefore surprised to see a photograph of this in Roy Dilley's article (*Airfix Magazine*, November '71) which I feel could be misconstrued as to the originator and construction. Balsa wood was not used in construction but various thicknesses of mounting board with spacers to give wall thickness. The cavity was then filled and fashioned with pre-coloured Polyfilla to represent brickwork, and the mounting board plaster. The white surface of the mounting board was stripped in places and left to hang as tattered wallpaper, jagged and scored Perspex inserted in the window frame and on the floor to represent broken glass.

Richard Steeds, Pinner, Middlesex.

The picture concerned came from Airfix, not Roy Dilley, and the origin was not previously known to us.—EDITOR.

## Caveat Emptor

I SHOULD like the opportunity to make comment about Mr G. Harvey's letter which appeared in the February edition of *Airfix Magazine*.

Whilst agreeing that there are some companies who tend to advertise goods they do not possess and whose service is not all that it might be, I feel that the majority of your advertisers are honestly trying to serve what can be a 'fickle' public.

The biggest problem facing retailers is the inability of manufacturers to supply the promised goods on time, and

with a copy date for advertisements several weeks before the appearance of the magazine it is often tempting to assume that the models advertised will be available when the advertisement appears. Of course, more often than not this does not happen. As far as not being able to supply goods is concerned, the response rate to *Airfix Magazine* adverts is such that one can often be caught completely by surprise. Other factors that affect companies involved in importing models can vary between delays at the despatch port to problems with HM Customs and Excise.

My own company policy is to always keep the customer informed and quite often we do not bank any money for goods that are delayed until the client has them. This enables us to return the original cheque if money back is requested. On the other hand, the modeller is not entirely blameless. Frequently pages of queries arrive without any return postage but the worse failing is the man who orders a kit and asks to be advised when it has arrived then fails to either acknowledge the advice, pay for the kit, or have the courtesy to inform you that he has obtained it elsewhere. The answer lies in the hands of people like Mr Harvey, by simply not dealing with those concerns who give indifferent service.

Bryan Philpott, Airframe (GB), Newbury, Berks.

## Body putty substitute

I AM stationed with the RAF in Germany but live in Roermond in Holland. Subsequently, what with language difficulty it is often difficult to obtain some of the basic modelling requisites such as body putty, cement, etc, except by sending to UK for them.

Recently I was converting the Airfix Macdonnell F-4E to the RF-4E. Midway I ran out of body putty and had to look for a substitute. I found this in Holts Loy Metal Mender. It is an excellent product it sets rock hard but can be sanded, sawn or filed. It bonds very well to Polystyrene and is also non-porous therefore needs no extra filler.

Some years ago I recall a letter in *Airfix Magazine* from a chap in Canterbury which concerned Whirlwind HAR10 of No 22 Sqn. He stated in the letter that the cloth bindings on the undercarriage legs covered weapon attachments points. I must point out that he was in error about this because having served in Whirlwind Units in Borneo, Odham and Leconfield I can assure him that they in fact are dust covers for the u/c oleo extensions.

Is. M. John, RAF Bruggen.

## Few hints

THE following hints may be of some use to other modellers. In the September 1971 issue C. L. Johnson gave us a tip on how to obtain a sheen effect using Duraglit. Duraglit can also be used as a paint remover. Simply rub hard on the painted surface that is to be removed and the paint will come off.

As most modellers have probably found that when cementing two pieces of a kit together it is hard to hold them till they dry. To overcome this difficulty I have used clothes pegs to hold small pieces together and elastic bands or Sellotape to hold big pieces together.

When painting the sails of Historic ships mix flat brown with thinners and then

brush on. This gives the effect of a weather-beaten ship.

Finally I have a useful idea for keeping paints, modelling knives, paint brushes, masking tape, etc., tidy. I bought a 'Raaco Cabi-net'. It has 25 small drawers and tins of paint etc., fit into these drawers perfectly. It has cards for labelling each drawer and the drawers can be sectioned off with perspex strips which are supplied. It costs £1.95 and is obtained from large branches of Woolworths.

Alan Ewen, Aberdeen, Scotland

## Military Markings

ALTHOUGH not myself interested in military modelling I thought that this letter may be of some help to those that are.

I was, after the usual training period for National Service, posted as a signaller to the 25th Field Regiment RA. At this time the regiment was stationed at Gun Club Hill Barracks, Kowloon, Hong Kong Crown Colony.

The Regiment itself like all field regiments was equipped with the 25 pounder gun Howitzer. Now what I think was unique for this period, 1948, was that the actual guns were not fitted with muzzle breaks, although by the middle of 1949 period they were. Also unique was that all regimental vehicles were, I think, of Canadian manufacture. The Gun Tractors or Quads as they were always called were either Chevrolets or Fords, all open topped, our 3 tonners and 15 cwt were Dodge, or Chevrolets and Fords respectively. Also we had a quota of Jeeps. Incidentally the colour of the vehicles depended on the paint available; this varied from vehicle to vehicle and could be semi-matt khaki, gloss green, or combinations of both; never matt.

Now to the constitution of the Regiment; this consisted of RHQ and 3 6 gun batteries. These were 35, 54 (Maharajapore), and 93 Batteries. Each Battery consisting of 2 Troops; ie Able and Baker: 35, Charlie and Dog: 54, Easy and Fox: 93. These of course being gun troops. The rest of each Battery were signals, clerks, etc.

The actual disposition of troops at that time in the Colony consisted of 3 Infantry battalions: 1st Buffs 2/6th and 2/10th Gurkha Rifles. Each of these battalions plus 1 Battery of Gunners were stationed in the New Territories in turn.

In 1949 the Chinese Communists approached the Border so considerable reinforcements were sent out from home. If memory serves me rightly these were 1st Leicesters, 1st Middlesex, 1st Argylls and 14th Field RA forming 27th Brigade and 1st Shropshire Light Infantry, 1st KOSB, 23rd Field RA and one further infantry battalion forming 28th Brigade. In addition there was a Brigade of Royal Marine Commandos, a Medium regiment and various other units, all forming 40th Infantry Division. Another unique occurrence insofar that the only other 40 Division was one of Kitchener's New Army, First World War Divisions. Our Brigade was numbered 26th.

Nearly all the above mentioned units served in Korea with the exception of 26th Brigade. This served in the Malayan emergency. Also 25th Field Regt had another, I think, unique

claim: it used 4 types of guns: the 25 pdr, the 17 pdr, the 3.7 AA and in Malaya the 5.5 Medium, in the space of a couple of years, and 35 Battery was at one time equipped with 25 pdr, 17 pdr, and 3.7 AA all at the one time.

Prior to joining 40 Division our vehicles were painted with the Hong Kong Land Force sign and the No 25 on the usual red/blue square. This was then changed to the fighting cock sign of 40 Division and the Regimental Number changed to 44.

The two senior Field Regiments were 42 and 43 respectively. Of the last part of this letter I am certain, having painted most of the division signs by hand myself.

E. B. Dyle, Wivenhoe, Essex.

## Phantom Exhausts

WHILE reading the December issue of *Airfix Magazine*, I came across the letter from Iain Barnard concerning the F-4D Phantom jet exhausts. Refer to the photos on page 376 of April 1970 *Airfix Magazine* or the F-4B exhaust.

They appear to be the same size as the F-4D. The F-4B uses J79-GE-8 engines while the F-4C,D, and the RF-4C use the J79-GE-15 engines. The difference is a cartridge starter on the USAF (F-4C,D) versions. What may be confusing is the constricting operation of the nozzles at different power levels. This can be observed on pages 60 and 61 of the book *The F-4 Phantom* by G. G. O'Rourke. Another excellent photo of the exhaust nozzle of the F-4D is on page 279 of *American Combat Planes* by Ray Wagner, Second Edition. This clearly shows the short nozzles. As shown on pages 11 and 12 of *The Phantom II* by Richard E. Gardner in the Almark series only the E and J versions have the longer exhaust outlets. The F-4E uses the J79-GE-17 engines and the F-4J uses the J-9-GE-10 engines. See also page 19 of *The Phantom II* for a comparison of the F-4E and F-4D jet exhausts, again the difference is apparent. The nozzles aren't smaller, just shorter.

The inboard pylon shown on page 377 of April 1970 *Airfix Magazine* is correct for the F-4D and the F-4E. It can also be used on the F-4C, however the Navy pylon can also be used on the F-4C as shown on page 63 of Profile No 208 on the Phantom. The pylon shown in the Airfix article is probably used on later F-4Cs. These machines could also have the IR sensor deleted.

Joseph Altnether, Rolling Meadows, Illinois, USA.

## Polished Plastic

I THINK the method of polishing unpainted plastics which I have discovered is worthy of note, because of the high gloss finish it produces. I use a product called MIN, a silicone cream furniture polish made by Chiswick Products Ltd, which can be obtained from most retailers.

To get a good finish put a thin layer of polish on the surface of the plastic, using a soft, clean cloth. Leave it to dry for a couple of minutes, and rub down the surface with a dry cloth. This will bring the plastic up in a high gloss finish.

Rather than paint the silver (or other basic) colour on airliner models, just try polishing the plastic instead.

J. Skoyles, Gt Yarmouth, Norfolk.



# Sopwith 1½ Strutter

An interesting conversion from the Airfix Avro 504 kit which is suitable for experienced modellers

by J. F. Chapman

THE major work of this conversion relates to the fuselage, although the chord of the wings must also be increased if the wings from the 504 kit are used. I overcame the latter problem by using the wings from a DH 4.

Assemble the 504 fuselage, complete with engine and cowling, and then cut it in five places. The first cut is made ¼ inch from the front of the cowling, the second immediately behind the forward cockpit, the third ¼ inch behind the rear cockpit, the fourth ¼ inch from the rear end of the fuselage. The fifth cut is not made at this point. The fuselage section with the forward cockpit is now reversed and cemented to the cowling so that the front edge of the cockpit is ½ inch from the front edge of the cowling, and plastic card bulkheads are then added to the new fuselage section so that when the rear cockpit is added the distance between the rear of the front and front of the rear cockpits is ½ inch. (If you have done the Baby conversion the cockpit section left-over can be used instead of plastic card bulkheads.)

The 1½ Strutter cowling has no cut-out section at the bottom, thus this gap in the 504 cowling has to be filled using scrap plastic and body putty. The three cooling slots in the cowling were represented by gloss black paint. Incidentally, the 'beaten panel' appearance of the 1½ Strutter's cowling can be achieved by pressing the silver paint when it is practically dry, with a piece of clean, fluffless cloth.

The edge of the fuselage behind the rear cockpit is shaved off so that when the rear fuselage section is added the fuselage upper line is horizontal (on the prototype there is a slight downward slope, but this is not noticeable on the model). Now remove a section from the rear fuselage portion so that when the last part is added the length of the fuselage from the front of the cowling to the end of the fuselage is 3½ inches. Finally, use plastic padding or other suitable filler to fair over the steps in the new fuselage and leave to set overnight before rubbing down and giving a coat of clear varnish to achieve a really smooth finish.

The wings are next to receive attention. I used the wings from a DH 4, which are the right size for chord but too wide in span. However, removing the excess span and rounding the tips is very easy, and there is an added bonus when using the DH 4 wings. The wing control surfaces are in practically the correct position, being only ⅛ inch out per side, an acceptable error at this scale I think. The wings are reduced to a scale span of 33 ft 6 inches and the tips are rounded off. The lower wing is then stuck in position so that the leading edge is ¼ inch from the front of the cowling. The lower fuselage is faired to meet the plan and the cowling is rounded off with plastic card and filler. The gaps in the lower wing trailing edge are cut square and are then filled, using pieces of the wing which were cut away when the span was reduced. The upper wing centre section trailing edge also



Above: A view of the author's model completed in standard First World War finish.

requires attention to make it match the plan but it is fairly simple and the same technique as was used for the lower wing can be used.

The fin and rudder are cut from plastic card and then sanded to the correct section. The tailplane is also shaped from plastic card, though on my first attempt I cut corners by using the 504 wings which have the right chord and in addition the elevators are in the correct position. The propeller from the 504 is canted the wrong way round for a 1½ Strutter but it is possible to cut the blades off and then reposition them.

The wing struts are made from those contained in the 504 kit and others from the DH 4. The centre section inverted Vee struts are made from the 504 skid struts, cut so that the wing was ¼ inch above the fuselage upper surface. The half-struts come from the 504 interplane struts reduced to ½ inch in length and the main struts from the DH 4 reduced to ¾ inch.

The undercarriage struts are made from plastic card, but the wheels come from the 504. The undercarriage track is 1 inch so it is just possible to use the 504 axle, though I made one from stretched sprue.

Final details are now added. A machine gun from the spares box is mounted over the cowling, and the rear cockpit gun mounting is added. I used a spare DH 4 mounting though it would be simple to make one from sprue, and finally a wind-screen is added to the front cockpit.

## Camouflage and Markings

*British Naval Aircraft* by Owen Thetford shows a line-up of RNAS aircraft in standard finish and number 19 seems to have the serial 9722. Wing roundels came from the DH 4, fuselage roundels from the 504K. The formation marking was made from squares of red and white transfer sheet. Once the transfers are in position, rigging is added from stretched sprue. *Naval Aircraft* does not show the rigging too clearly, but I was able to use the photographs in *The Book of Westland Aircraft*, published by Harborough in about 1944. This book was also of great use in the actual conversion work as it contains a three-view drawing in 1:144 scale. The Profile on this aircraft is also most useful.

I have only given what I consider to be the basic information required for anyone who wishes to undertake this conversion. Anyone who does undertake it will find that at the end he will have a very pleasing model of an important example of the RNAS/RFC armoury of 1917.

## BOOK NEWS

JUST published in Great Britain is *Automobile Year No 19* (Patrick Stephens Ltd, £5), a lavish and luxurious record of the motoring world in 1971 covering the racing and competition aspects in the main but also including a section on recent 'connoisseur' cars. There are over 250 pages, 450 photographs and 65 colour plates. Coming shortly is a superb book for model railway fans, *How To Go Railway Modelling* by Norman Simmons, well known for his model railway articles in this magazine. It contains 111 photographs and over 100 drawings and includes chapters on many aspects of the subject. Price: £2.60.

Left: Crusader AA with unit serial number revealing it as a 4th/7th Royal Dragoon Guards vehicle. The 30th Armoured Brigade formation sign, a red fox mask on a yellow square, is painted above the serial. These markings should be useful for application to the model Crusader AA described in this issue (Chamberlain Collection).



# M C MODEL HOBBY CONSORTIUM

363 Lewisham High St.  
London, SE13  
Tel: 01 690 5885

<b>TANKS</b> 1/35 Scale— All Motorised Russian JSIII Stalin £2.30 T55 Russian Tank £1.60 British Centurion Tank £2.60 T34 Russian Tank £1.40 British Chieftain Tank £2.30 Japanese Type 61 Tank £2.30 German King Tiger Tank £2.30 German Hunting Tiger Tank £2.30 Saladin Armoured Car £1.15 M8 Armoured Car £99p U.S. M551 Sheridan Tank £2.30 German Leopard Tank £2.30 U.S. M36 Type B2 Destroyer £1.60 Tiger I £2.30 U.S. M42 Ouster £1.80 German Panther Tank £2.30 German Rommel (Jagd Panther) £2.30 U.S. M41 Tank £1.60 <b>TANKS</b> 1/35th Scale with Two Motors and Remote Control German Leopard Tank £2.99 King Tiger Tank £2.99 Hunting Tiger Tank £2.99 Tiger I £2.99 Russian JSIII Stalin £2.99 German Panther Tank £2.99 German Rommel Tank £2.99 U.S. M41 Walker Bulldog £2.40 U.S. M4 A3 E8 Sherman £2.40 U.S. M42 Ouster £2.40 Russian T34 Tank £2.25 Russian SU100 Jukoff £2.25 U.S. M60-A1 Cheyenne £3.50	<b>HISTOREX</b> 54 mm Mounted £1.65 Foot 80p Large stocks of all. Plus the 'Scots Greys' and the new Foot Marshals on foot, Full Uniform, Berthier, Davout, Montier, Soult, Bessieres, Poniatowski, Gouvion-St-Cyr, Murat. Complete Gun Team £8.00 Paint Set 9 Colours £1.37 Horses 85p Pyrogravure £3.87 Accessories 37p Catalogue 35p plus 5p post <b>PYRO</b> 1/1200 SHIP KITS Perfect for Wargaming 12p each U.S.S. Hornet, U.S.S. South Dakota, U.S.S. Essex, U.S.S. Washington, U.S.S. Lexington, U.S.S. North Carolina, I.M.S. Musashi, I.M.S. Zuikaku U.S.S. Yorktown, U.S.S. Massachusetts, I.M.S. Yamato, I.M.S. Syokaku <b>ARTIPLAST</b> (Trade enquiries invited) 1/48, 1/50 Aeroplanes Macchi M.B. 326 60p Fokker D.R. I 60p Bristol Bulldog 60p Avro 504K 60p De Havilland DH2 60p Fokker D VII 60p SE5 Scout 60p Tiger Moth 60p Albatross D III 60p Nieuport 60p Macchi M416 60p	Ansaldo SVA 5 60p Macchi M.C. 72 60p Macchi M.C. 200 60p Camel 60p Caproni Reggiane 2000 60p Fiat G55 60p Fiat G91 (Italy or German) 60p Ju 87 Stuka £1.52 1/48 PLANES Bristol Bulldog 60p Fairley Flycatcher 60p Gloster Gladiator 60p <b>AURORA</b> Sopwith Camel 56p Albatross D-3 56p Fokker DR-1 56p Fokker D-7 56p Albatross 56p BF 109 56p <b>MONOGRAM</b> D.H. Mosquito £1.30 Albatross D-3 £1.30 Grumman Wildcat 58p 109E Messerschmitt 58p Hurricane 58p P.51B Mustang 58p Focke-Wulf 190 58p P-39 Airacobra 58p Hellcat 58p Avenger 58p P-47D Thunderbolt 58p Helldiver 58p Kingfisher 58p Dauntless 58p <b>LINDBERG</b> Macchi Hunter 73p ME-262 73p	<b>HAWK</b> Grumman Bearcat 85p <b>NICHIMO</b> P-51D Mustang 82p <b>1/72 PLANES</b> LINDBERG Hellcat 44p Kingfisher 44p Henschel 129B 44p Dornier 335 44p ME 410 44p Heinkel 219 73p <b>MONOGRAM</b> Catalina 72p Hawk P-6E 45p Goshawk 45p Complete ranges of Airfix, Frog and Revell <b>NEW Revell</b> available soon Coastal Command Catalina 75p Coastal Command Boeing Fortress 75p 1/32 Mosquito IV £1.55 1/32 ME 262 £1.15 1/32 Focke-Wulf 190-D £1.15 <b>HELMET KITS</b> 54mm 50p 2 British 'Inniskilling' Dragoons 1815 58p 3 The Scots Greys, 1815 58p 4 French Line Dragoons Trooper, 1815 58p 5 French Line Dragoons Officers, 1815 58p 6 Russian Heavy Cavalry, 1812-15 58p 9 French General Cuirassiers, 1810-15 58p 10 French Empress Dragoons, 1806-15 58p 12 French Horse Grenadiers, 1807-15 73p	13 French Cuirassier Officer, 1810-15 14 French Cuirassier Troopers, 1803-15 Cement 10p <b>WARSHIPS</b> Scale 1/250 <b>CARD MODELS</b> 1200 U.S. Forrestal Aircraft Carrier as 1965 (U.S.A.) £4.80 1201 Bismark Battleship £2.68 1202 Schleswig Holstein pre Dreadnought as 1930 £1.75 1203 Leipzig Light Cruiser £1.30 1204 Scharnhorst £2.10 1205 Koln Light Cruiser £1.30 1206 Nurnberg Light Cruiser £1.10 1207 Admiral Hipper Heavy Cruiser £1.54 1208 Emden Light Cruiser £1.10 1210 Lutzow Pocket Battleship £1.10 1219 Jaguar Torpedo Boat Destroyer 54p 1220 T.1 to T.12 Class Torpedo Boat 54p 1221 Z.1 Destroyer Forest Sherman Class (G/USA) 94p Authentic Railing, 4 foot 35p <b>AIRFIX</b> 54 mm COLLECTOR KITS British 10th Hussar 25p British Guardsman 19p
--	--	--	---	--

## MAIL ORDER

INSTANT TURN ROUND—SUBJECT TO AVAILABILITY OF ORDER  
P. & P. UP TO £3.00—15p OVER £3.00—FREE  
IT IS REGRETTED THAT NO LETTERS CAN BE ANSWERED UNLESS ACCOMPANIED BY A S.A.E.  
OVERSEAS ORDERS PLEASE DEDUCT 14p=£1.0 PURCHASE TAX

## A. A. JOHNSTON Military Books Pitney, Langport, Somerset

Telephone Somerton 713

<b>* AT THEM WITH THE BAYONET!</b> —The First Sikh War D. Featherstone Illustrated, 200 pages, hardbound. Post free £1.64	<b>* UNIFORMS AND BADGES OF THE THIRD REICH</b> R. Kohl Vol. I NSDAP, 287 illustrations, hardbound. Post free £3.56 Vol. II SA, NSKK, SS, 556 illustrations, hardbound. Post free £4.61 Vol. III HJ—NSFK—RAD, 481 illustrations, hardbound. Post free £4.06
<b>* A HISTORY OF THE DRESS OF THE BRITISH SOLDIER</b> , from the Earliest Period to the Present Time Lt. Col. J. Luird, 1852 A superb limited numbered, facsimile reprint of this scarce work bound in simulated morocco, complete with the 50 full page drawings. Post free £5.75	<b>* FAKES AND FRAUDS OF THE THIRD REICH</b> Peter Stahl 44 pages, illustrated, softbound. 2nd revised enlarged edition £1.40 <b>DIE WAFEN SS</b> Die Waffen SS contains details of Foreign Legions, composition of the various Divisions, eight colour pages. £2.34
<b>* STAHLHELM</b> Evolution of the German Steel Helmet 104 pages prof. illust. with photographs and drawings, softbound. Post free £2.62	<b>* GERMAN 88 mm ANTI-AIRCRAFT GUN MATERIAL</b> Facsimile reprint of this US War Dept. Manual. Covers every use of this famous gun with hundreds of photographs, drawings, etc. 197 pages. Post free £2.37
<b>GERMAN ARMY UNIFORMS AND INSIGNIA 1933-1945</b> B. L. Davis 375 photos and drawings, over 200 pages and pages of colour which include Shoulder Straps, Collar Patches, also 120 Bayonet Knot colours! Post free £4.50	<b>* THE SUBALTERN. A Chronicle of the Peninsular War</b> G. R. Gleig Author was with 85th Regt., one of the most entertaining accounts of the war. Maps, 400 pages, hardbound. Post free £2.26
<b>BUTTONS OF THE BRITISH ARMY 1855-1970</b> H. Ripley 50 plates illustrating over 600 buttons. Post free £1.60	<b>* NAZI MEDALS. A Collector's Handbook-Descriptions-Values</b> E. L. Beard All the major campaign awards and badges, over 70 illustrations, 50 pages spiral bound. Post free £1.41
<b>* HANDBOOK ON GERMAN MILITARY FORCES 1945</b> Facsimile reprint of the U.S. War Dept. Manual, prof. illust. 1000 photos and drawings, 8 pages in colour, 550 page, softbound. Post free £7.00	<b>* INSIGNIA, DECORATIONS AND BADGES OF THE THIRD REICH AND OCCUPIED COUNTRIES</b> R. Kohl 800 illustrations, hardbound. Post free £4.61
	<b>* THE FRENCH IMPERIAL ARMY The Campaigns of 1813-4 and Waterloo</b> Uniform colour guide, illust. 52 pages, softbound. Post free £1.41
	<b>* MILITARY DICTIONARY, German-English, English-German, 8½ x 11", stiff paper cover. Facsimile reprint of the U.S. War Dept. Technical Manual. Post free £1.34</b>
	<b>* THE FRENCH INFANTRY AND ARTILLERY 1795-1812</b> Uniform colour guide, illustrated, 12 pages, softbound. Post free 71p
	<b>* THE ORDEAL OF CAPTAIN ROEDER</b> Based on the original diary, the vivid account of the Napoleonic Army and its retreat from Russia, illustrated, hardbound. Post free £1.39
	<b>PANZER IN RUSSLAND</b> H. Scheibert and U. Elfrath Profusely illustrated account of the German Tanks on the Eastern front. German and English text. Post free £5.00
	<b>MODEL SOLDIERS</b> P. Blum A basic guide to painting, animating and converting. Very well illustrated. Post free, Hardbound £1.39 Softbound 82p

Organisationsbuch der  
NSDAP  
(Organization Book of the Nazi Party)  
1943 Edition

63 PAGES OF COLOUR this book illustrates every uniform, badge, insignia and flag of the German National Socialist Party. HARD COVER, 650 PAGES, ORIGINAL TEXT AND CONTENTS UNALTERED. A separate GERMAN-ENGLISH GLOSSARY is included to aid in translation. Post free £9.29

Dealers' enquiries welcome for all titles marked \*



**BELLONA BATTLEGROUND**  
OO/HO. All at 19p each. Min. order 2

B1 British Artillery Pos. and Mortar Pit  
B2 German Artillery Pos. and S.P. Gun Pos.  
B3 Three Bunkers, one ruined  
B4 Seven Gun Emplacements  
BB10 Two Cottages reduced to ruins  
BB11 British Pillbox and Dugout  
BB12 Encampment of 12 Bivouacs  
BB13 Tank Traps  
BB14 German Pillbox and M.G. Pos.  
BB15 Two Revetted Earthworks  
WV1 Six Lengths of Walling  
WV2 Three Lengths of Long Stone Wall  
RV1 Three-span River Bridge  
RV2 River Bridge  
RV3 Culvert Bridge plus Three Walls  
RV4 River Section (Straight)  
RV5 River Section (Curved)  
RV6 Stream Section (Straight)  
RV7 Stream Section (Curved)  
RV9 River Bridge in Ruins

**ARMTEC ACCESSORIES**  
176 Minicase Scale 19p set  
Set 1 1 M.G. 42, 1 M.G. 34, 2 Bivouacs, 2 A.A. Mounts, 4 Ammo Drums, 1 M.G. Shield  
Set 2 10 Jerry Cans  
Set 3 U.S.A. AFV Tools  
Set 4 German Pioneer Tools  
Set 5 German Breakdown Equip.  
Set 6 German Spare Tracks  
Set 7 Tow Chain

SEND 10p AND LARGE S.A.E. FOR FULL LISTS OF PROFILES, TRANSFERS, BOOKS

**ALMARK PUBLICATIONS**  
British Infantry Regiments \*£1.35 87/p  
Waffen SS \*£2.25 £1.75  
Japanese Army Uniforms and Equipment \*£1.35 87/p  
Indian Cavalry Regiments \*£1.75 £1.25  
French Napoleonic Artillery \*£1.50 £1.00  
French Napoleonic Lancers £1.25  
American Civil War Infantry \*£1.35 87/p  
German Artillery 1914-18 \*£1.35 87/p  
German Infantry 1914-18 \*£1.50 £1.00  
German Combat Uniforms \*£1.25 87/p  
Scottish Regiments and Uniforms 1660-1914 \*£1.50 £1.00  
Regiments at Waterloo \*£1.75 £1.25  
Wehrmacht Divisional Signs 1939-1945 \*£1.65 £1.25  
British Military Markings 1939-1945 \*£1.75 £1.25  
British Infantry Colours \*£1.50 £1.00  
The Life Guards 1660-1914 \*£1.75 £1.25  
Plastic Scale Model Aircraft \*£1.60 £1.00  
British Cavalry Standards \*£1.75 £1.25

**NEW TITLES**  
Scale Model Soldiers \*£2.00 £1.50  
Wehrmacht Illustrated Series No. 3 Panzer Grenadiers 50p ea.  
No. 4 German Half Tracks 50p ea.

Afrika Korps 50p Panzerjager 50p  
\*Indicates hardbound

**AURORA MONSTER AND T.V. SERIES KITS**  
Phantasma, Forgotten Prisoner, Creature, Mummy, Frankenstein, Phantom of the Opera  
Glow 80p Non-Glow 57p  
King Kong, Godzilla, The Witch (Glow) £1.05  
Hunchback of Notre Dame (Glow) £1.22  
Guillotine 67p  
Lost in Space Robot Astronaut  
Lost in Space Monster 61p  
**LAND OF THE GIANTS**  
SPACESHIP £1.22  
U.F.O. from the Invaders, The Voyager, Flying Sub, Land of the Giants Snake £1.22  
2001 Moon Bus £1.33  
Sealab £1.33  
Post and packing 15p per kit  
**EXPECTED ANYTIME—**  
STAR TREK Mr. SPOCK £1.90 80p  
Order yours now and save disappointment

**PURNELL'S HISTORY OF THE SECOND WORLD WAR**  
Series of books  
Bastogne, Aircraft Carrier, Buccaneers, Bomber Offensive, SS & Gestapo, The Guns '39-'45, Tank Force, Waffen SS, Panzer Division, By Air to Battle, Spitfire, Me 109, Siege of Leningrad, German Secret Weapons, Defence of Moscow, Nuremberg Rallies, Raid at St. Nazaire, Luftwaffe, Barbarossa, Sicily, Okinawa, Anzio, Midway, Barrage, Rocket Fighter T.34, Liberation of the Philippines, London's Burning, Japan, Pearl Harbour, Allied Secret Weapons, Kasserine, Battle of the Reichswald, Normandy Bridgehead, Airborne Carpet, Leyte Gulf, The Raiders, Tarawa, Defeat in Malaya, Zero Fighter, Commando, B.29, France 50p ea.

**POST AND PACKING**  
U.K. Add 10p. Min. 10p. Over £5.00 free.  
**OVERSEAS.** See last month's ad. or send sufficient—balance will be credited.

**PAINTS, TOOLS & MATERIALS**  
Humbrol Authentic Sets  
Aircraft: RAF European/Luftwaffe/USAF/Fleet Air Arm/RAF Overseas/French/Italian/Japanese/USAF Vietnam/World War I/NATO/Russian.  
Military: Vehicles/Combat Uniforms/Equipment/Ceremonial Uniforms.  
Spray Gun and Propellant £1.40  
White Plasticard (13" x 9") 10 thou. 5p, 15-7p, 20-8p, 30-11p, 40-16p, 60-24p  
Clear, 10 thou-9p, 20-11p  
Embossed Plasticard—Brick, Stone Course, Random Stone 12p  
Plank Card—4" x 20". 2 mm, 4 mm, 6 mm 5p  
Plastic Rod. Asstd.—25p, Micro Strip. Asstd.—25p  
Metal Skin. Gloss or Matt 25p sht.  
Corrugated Plasticard—6p, Mek Pak—12p or 25p. Body Putty—20p.  
Plastic Cement—5p, Thinners—7p and 12p. Brush Cleaner—15p, Universal Cleaner 18p

**TOOLS**  
Craft Knife and 2 Blades 15p  
Spare Blades. 1, 2, 3 2p each  
Finest Squirrel Brushes. OO, O, 1, 2—9p each  
3, 4—10p, 5—11p, 6—12p, 7—15p  
Super Sable Brushes. OO—18p, O—20p, 1—22p, 2—25p, 3—33p, 4—40p, 5—50p

**X-ACTO TOOLS**  
No. 1 Knife 30p No. 2 Knife 30p  
Micro Saw 30p Pin Vice 57p  
Razor Saw and 2 Blades 90p  
Razor Saw Blades 1" wide, 3" wide 17p each  
Blades for No. 1 Knife 20p (5)  
Straight No. 11 25p (5)  
Curved No. 10 25p (5)  
Blades for No. 2 Knife 20p (5)  
Straight No. 24 25p (5)  
Curved No. 22 25p (5)  
Jeweller's Saw £2.30  
Needle Files: Flat, Round, H/Round, Square, Triangle 24p each  
Drills to fit Pin Vice: 1/32" and 1/16" 8p each  
G.-Clamps (set of 3) 43p. Tweezers 10p

## At long last the 'DOME' all figure modellers have been waiting for

Overall height 5 1/2"  
Base diameter 3"

A perfect fit for Stadden 90 mm. and Series 77. With a small additional block inside, ideal too for Historex and other 54 mm. foot figures. Made in clear polypropylene with a fitted wooden base.



Price £1, including post and packing, from

**HISTOREX AGENTS**  
3 CASTLE ST., DOVER - Trade enquiries invited

**AF AIRFRAME (GB)**  
PO BOX 14  
NEWBURY, BERKS.



## THE LATEST IDEA IN CONVERSIONS: AIR CONVERSIONS HUNTER T7

Now available at 45p + 5p post and packing.

This conversion consists of moulded parts to convert the Airfix Hunter F6.

The Hunter T7 is also available from distributors shown below:

**Scandinavian Modellers:**  
Hobby Service can supply—Historex, Floquil Colours, Polly S Colours, Helmet Figures, Decals, Armour kits, plus many others including Airframe and Rareplane kits.

**THE GRUMMAN XF5F-1 SKYROCKET £1.15 IS ONLY ONE OF THE UNUSUAL AND RARE AIRCRAFT IN THIS 1:72 SCALE RANGE OF VACCU-FORMED KITS**

Other kits available in this range:

- 1 Fokker DV111 90p
- 2 Bristol M1c 90p
- 3 Bachem BA 139a 90p
- 4 Fokker XXIII £1.15
- 5 D.F.S. 230A £1.15
- 6 Martin Baker MB5 £1.15
- 7 Siemens Schuckert D111 90p
- 8 Morane Saulnier L 90p
- 9 Ohka (Baka Bomb) 45p
- 10 Grumman XF5F-1 Skyrocket £1.15
- 11 Blohm & Voss HA 139 £2.20

- 12 Westland Hill Pterodactyl Mk 1 90p
- 13 Phoenix D1 Scout 90p
- 16 Vickers Wellesley £1.25  
Please add 5p per kit for postage.

Sole U.K. Distributor:  
Airframe (GB)  
P.O. Box 14  
Newbury, Berks.

Scandinavia:  
Hobby Service  
Box 13  
S-131-01 Nacka 1  
Sweden.

All Other Areas:  
From the designer of these kits:  
John Tarvin,  
5166 Portland St, Burnaby 1,  
British Columbia, Canada.

**SPECIAL OFFER**  
From Airframe (GB) only.  
1:32 Hasegawa Curtis BF2C1 £1.75

1:32 Hasegawa Boeing P12 £1.50  
1:72 Hasegawa F106 50p  
Post and packing 15p per kit.  
Any two post free.

Limited quantities for a limited period.

We also stock Rareplane Vaccu-form kits  
Northrop A-17A 66p  
Henschel HS126 66p  
Lavochkin LA-5FN 66p  
Post and packing 5p.

**AVAILABLE SOON**  
M.A.S. Vac-Form kit of the SAAB J29 75p each  
1:72 scale

Next Airframe release (Mid-April) kit No. 14 Grumman XP50 £1.15  
We can only reply to letters accompanied by a S.A.E.



## New from Profile



235 Avro Lancaster Mk. II  
An important Profile! Everyone knew the Merlin "Lancs" but one in 25 had Hercules radials. The rare Mk. II is lovingly captured in four pages of colourful artwork.



41 M103 Heavy + M41 Light (Walker Bulldog)  
Deals with the T41 which was standardized as M41—Walker Bulldog, also T43—M103 Heavy Tank



42 Modern Swedish Light Armoured Vehicles  
Included are Pbv 302 armoured personnel carrier and derivatives



16 HM Submarine Upholder  
This U-class submarine's Commanding Officer, Lt. Cdr. M. D. Wanklyn, was awarded the Victoria Cross.



7 Heckler & Koch (An Armoury)  
Heckler & Koch have a range of weapons which is equalled by only a few long-established firms. This Profile gives previously unpublished details of the weapons which equip a modern army.

21 R.O.D. 2-8-0s  
Over 500 of these famous British freight engines were built. One of the most economical locos ever used in Britain.

**Profile Publications Limited**  
Coburg House Sheet Street Windsor Berkshire Tel Windsor 69777

## DISPLAY YOUR PRIZED COLLECTION

in a beautiful cabinet

Perfect for displaying military miniatures, model cars, locos, small antiques, gem stones, shells etc., etc. Craftsman made in solid hardwood finished satin teak, hardboard back in white enamel, sliding glass front. Type A (illustrated) 17 1/2" x 11 1/2" x 2 1/2". Shelves 16 1/2" long x 1 1/2" deep. 2 1/2" clearance. Price £3.35. Type B 17 1/2" x 11 1/2" x 3 1/2". Shelves (3 including base) 16 1/2" long x 3" deep. 3 1/2" clearance. Price £3.60. Type C as B but two shelves (including base) and 5 1/2" clearance. Price £3.50. All prices inc. P. & P. Trade enquiries welcome. Dept. AM 5.

**CASES (HALIFAX) LTD**  
Wellington Street South, HALIFAX, Yorks.  
Tel: 0422 52503







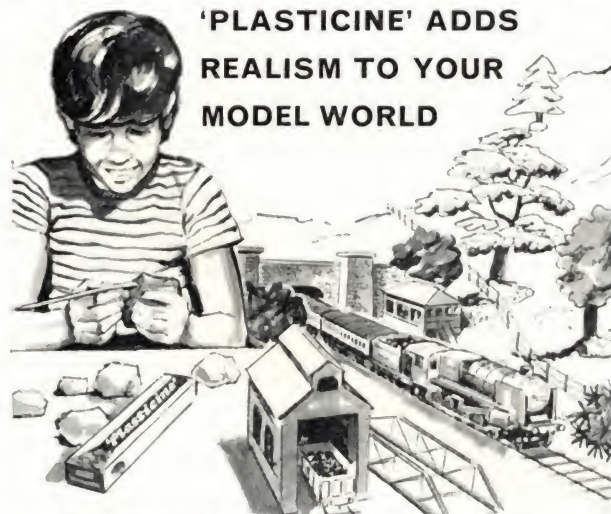
## Motor Age

1900-1904  
1925-1929  
1930-1934

The first in an exciting new series of photographic albums compiled by **Peter Roberts** which traces the development of the motor car from early days. Each album covers a five-year period in motoring history illustrated by fully-captioned photographs and *Punch* cartoons. The earlier, more leisurely years before the car was commonplace are vividly recalled in these first three volumes. 11" x 8 1/2" 52 pages 60p each

from leading booksellers, or direct from

**IAN ALLAN** TERMINAL HOUSE - SHEPPERTON - MIDDLESEX - TW17 8AS



**'PLASTICINE' ADDS  
REALISM TO YOUR  
MODEL WORLD**

To make your settings really convincing, add the finishing touches with 'Plasticine'. There's a world of scope in every pack. Choice of 18 colours in king-size 1 lb. economy packs. From all reputable toyshops, stationers and dealers in artists materials.

**A Harbutt PRODUCTION** Set the scene with 'Plasticine'

Harbutt's Plasticine Limited, Bathampton, Bath BA26TA

# aviation books galore!

History - Reference  
Modelling - Engineering  
Computers - Navigation  
Flying - Construction

We carry a comprehensive U.K. and International range of books on all aspects of aviation and armour.

Send 12p for list. Refunded on orders of £2.50 or more. Personal callers welcome.

Tel: 01-836 5376

Motor Books & Accessories 33 (AM) St. Martin's Ct., London WC2

**1:72 AIRCRAFT MARKINGS 1:72**  
Full markings, including 4 view scale drawing, all to 1:72 scale, for the following aircraft.

- SHEET 1.** Whirlwind, P6989, HE-V, August 1940.  
Hurricane, L1583, Factory finish, 1938.
- SHEET 2.** Defiant, L6957, PS-T, February 1940.  
Spitfire, X4561, QJ-B, December 1940.
- SHEET 3.** 'Battle of Britain'.  
Bf109E, 9/JG2, Hurricane, P3144, GZ-B.

PRICE: OVERSEAS, 30p each (NZ \$0.65) including airmail post.  
NEW ZEALAND, 55c each including post.

**SCALE REPLICAS**

32 St. Albans Avenue, Wellington 5, New Zealand

**AIRFIX**  
magazine

# Classified Adverts

RATES: 5p per word. Minimum charge 50p

BOX NUMBERS: 20p extra charge

All advertisements must be prepaid

Please state classification required

Please address your correspondence to:

AIRFIX MAGAZINE Classified Advertisement Department

9 Ely Place, London, EC1N 6SQ

Closing date for next issue—April 1

## FOR SALE

Aircraft Posters 16" x 12" now available from C. R. Whitton, 36 Bryce Road, Currie, Midlothian. Send 15p for lists and sample. [1143S]

Airfix Magazines 1968-1971. Aircraft Illustrated March '68—December '71 +9 extras. Air Pictorial August '69—December '71. Scale Models 1971. Offers: Johns, 24 Pelstream Avenue, Stirling FK7 0BE. [1143S]

Airfix Magazines: January '69—December '71. Military Modelling: No. 1—Date. 49 Oakdale Close, Downend, Bristol BS16 6EF. [1148S]

Number Aviation Books, S.A.E. List. Purnell's History World War II, 8 vols. Offers: Gould, 50 Abbeyhills Road, Oldham, Lancs. [1149S]

Airfix Magazines, Sept. '63—April '69. Offers please, Smith, 192 Sunnyhill Road, London, SW16. [1150S]

Colour Slides of aircraft, mainly military. Sets and Singles. SAE for NEW list. T. Parris, 13 Bradford Street, Eastbourne. [1153S]

## ATTENTION WARGAMERS: OPERATION WARLORD

South London Warlords open day Easter Monday at the Surrey Tavern, Kennington Oval, London. Starting 11.00 a.m. Entrance Fee 25p.

Trade Stands, Dioramas, Displays. Competition for Club Trophy. Please come and bring your friends.

**THIS SPACE COSTS  
JUST £13.50**

and will sell your product  
to readers of  
**AIRFIX MAGAZINE**

For full details write or  
phone

**JACKSON-RUDD  
& ASSOCIATES LTD.**

Martin House

84-86 Gray's Inn Road

London, W.C.1

Tel: 01-405 3611

Magnificent books for naval and maritime modellers and enthusiasts from the  
**UNITED STATES NAVAL INSTITUTE**

now readily available in Great Britain, British Commonwealth and Europe from the Sole Distributors

**Patrick Stephens Limited**

9 Ely Place, London EC1

(Tel 01-405 2297)

**SEND FOR FULL CATALOGUE OF  
OVER 130 USNI BOOKS**

The publishers of AIRFIX MAGAZINE must point out to readers that, while every care is taken to check the bona fide nature of all classified advertisements, they cannot accept any responsibility for disputes which might arise.

## WANTED

**Observers' Books** of Aircraft pre 1957. State price. B. Chipps, 19 Marldell Close, West Leigh, Havant, Hants. [1145W]

**Wanted**, by Private Collector, Dinky model of Armstrong Siddeley Hurricane, any condition. State price required. Roberts, "Glanwyne", Upton Scudamore, Warminster, Wilts. [1146W]

**WW II Aircraft** identification models, 1/72 solid moulded. Crawford, 1717 Avondale, Ann Arbor, Michigan, USA. 48103. [1147W]

**Airfix Magazines** Vol 1—Vol 12 No 4 inclusive. S. Cockshutt, 153 Oatlands Drive, Welbridge, Surrey. [1151W]

**Following Old Frog kits**, preferably unbuilt—FD2, Meteor 8, Canberra, Thunderjet, DH 110, Javelin, Venom. Cash or exchange for Attacker, Hunter 1. Box No 1154W [1154W]

**1st Edition Profile Publications** Aircraft, Vols 6 & 7 Harborough Publications. D. Ashman, 55 Triton Fields, Kennington, Ashford, Kent. [1155W]

**Unbuilt Frog** 1/72 Venom, 1/96 Victor and Valiant, also Frog Dennis Ambulance. State price. Hardy, 12 Park Close, Markyate, Herts. [1156W]

## 1/72 VACUUM FORMED KITS & CONVERSIONS

### NEW!

Heavy Conversion Unit No. 3  
Airfix Wellington III to Wellington II 64p full unit

### NEW!

Kits for Blackburn Botha	70p	A.W. Albemarle	85p
Waco CG.13A	62p	General Aircraft Hamilcar	82p
Mikoyan Mig 9	35p	Lavochkin LA.15	35p
Yakovlev Yak 15	35p	Tupolev Tu 14	68p

(Twin or Triple Engines)

Conversion Units 1 and 2 still available £1.25 each

U.K. Post and Packing included—Overseas please add 30p

G. Sutcliffe, The Orchard, Westcombe,  
Shepton Mallet, Somerset

## AIRFIX MAGAZINE— Back Numbers

Copies are available of all  
issues from  
**March 1969 onwards**  
(except for January 1970)

Back copies cost 18p each, including postage (23p from November 1970 issue onwards). Please address all requests for back copies, together with your remittance, to our circulation department at **SURRIDGE DAWSON & CO. (PRODUCTIONS) LTD, PUBLISHING DEPT, 136 NEW KENT ROAD, LONDON SE1.**



# to have and to hold... your AIRFIX magazines

The Classified Advertisement columns of this issue of AIRFIX MAGAZINE prove that copies of every issue become more and more valuable as time goes on. The circulation and readership increases steadily each month so that supply very often cannot keep up with the demand and you may well miss a copy. Make sure this doesn't happen to you by ordering a regular copy from your newsagent, or alternatively take out an annual subscription using the form below:

To: AIRFIX MAGAZINE — Subscription Dept.

Surridge Dawson & Co. (Productions) Ltd.,  
136/142 New Kent Road, London, S.E.1.  
Please send me AIRFIX MAGAZINE each month by  
post on publication for a 12 month period commencing  
with the ..... issue. I enclose my cheque/  
postal order for £2.52. (Postage inclusive). (USA \$6.75)

Date..... Signed.....

NAME.....

ADDRESS.....

Please write clearly in block capitals. AM 4/72

Once you take AIRFIX MAGAZINE regularly, treat your copies like gold dust by preserving them in AIRFIX MAGAZINE EASIBINDERS. Order these now for your valuable back numbers, your last year's copies or even your next year's copies, using the form below.

To: AIRFIX MAGAZINE — Easibinder Dept.  
PSL Publications Ltd., 9 Ely Place, London, E.C.1.

Please send me ..... special AIRFIX MAGAZINE  
Easibinder/s immediately at £1.25 each, post and  
packing free. I enclose my cheque/postal order  
for £..... Signed.....

NAME.....

ADDRESS.....

Please write clearly in block capitals. AM 4/72

## AIRFRAME (GB) P.O. Box 14 Newbury Berks



### Hunter T7 Conversion by Air Conversions

This kit consists of moulded parts to convert the Airfix Hunter F6 and is the first release in this new range the reviewers are raving about 45p plus 5p post and packing

Main Distributors:  
Airframe (GB) P.O. Box 14  
Newbury Berks

EXPORT ENQUIRIES WELCOME

## EVERYTHING FOR PLASTIC MODELLERS

NOW! OUR OWN COMPLETE PLASTIC  
KITS CATALOGUE 22p post paid

### NEW FIGURES

LASSET 54 mm Metal Figures Unpainted £1.06 each.  
ALSO LASSET Metal Spare Parts from 6p each.  
Get the ILLUSTRATED LASSET List 6p post paid.  
HISTOREX 1st Regt. SCOUT GRENADIERS—mounted £1.65.  
HISTOREX 2nd Regt. SCOUT DRAGOONS—mounted £1.65.  
HISTOREX 3rd Regt. SCOUT LANCERS—mounted £1.65.  
HISTOREX ENGINEER CORPS of the GUARD—foot 85p.

### DUE IN MAY!

TAMIYA 1/35th German PARATROOPERS 30p.

### NEW AIRCRAFT KITS

AIRFIX 1/24 M.E.109E £1.95. Prop Motor 32p extra—old price.  
AIRFIX D.H.2 BEAVER 35p.  
REVELL R.A.F. B17 1la 75p.  
REVELL R.A.F. CATALINA 75p.

### NEW SHIPS

AIRFIX H.M.S. MANXMAN 25p.  
TAMIYA VOSPER PATROL BOAT £4.40.

### NEW CARS

AIRFIX PORSCHE 917 25p.

PLEASE ADD POSTAGE TO ALL ORDERS

CATALOGUES: 1972 Airfix 22p, 1972 Revell 17p, 1972 Aurora  
22p, 1972 Triang 20p, Frog 10p, Slaters 18p, Heller 13p, Historex  
40p, etc. All post paid.

JONES BROS. OF CHISWICK  
56 Turnham Green Terrace, Chiswick, W4.  
Tel. 01-994 0858 Est. 1911

Closed all-day Thursday

Member I.P.M.S.

It's a question that strikes coldly on the ear of the middle-aged. A generation has grown up which may not even have seen the film 'The Dam Busters', much less remember the real-life chapter of a famous RAF squadron. For a generation to whom Agincourt, Trafalgar, and Waterloo are more familiar names than Möhne, Eder, and Sorpe, we briefly retell the splendid story.

It's a story in which the heroes are numbered in hundreds and the supporting players in their thousands, but none of them would begrudge a special mention of Dr Barnes Wallis, who invented the bouncing bomb, and Wing Commander Guy Gibson VC DSO DFC, who formed and led 617 Squadron—the Dambusters.



## "617 SQUADRON?" NOW WHO WERE THEY?"



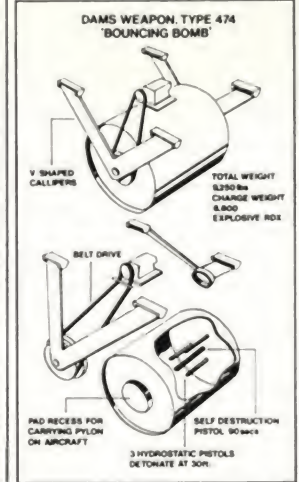
inventor that spanned sixty-five years. His mind was on the Ruhr Valley, home of a concentration of German industry and, therefore, German war effort. It would take an unimaginable number of bombs to cripple that industry, but—he observed—the Valley already contained a potential destructive force many times greater than any Britain could deliver. There were hundreds of millions of tons of water held in check by dams—seemingly invulnerable concrete dams.

If those dams could be reached, fantastic avalanches of water would flood down the Ruhr valley destroying factories, robbing steel works of their industrial water, putting hydro-electric power stations out of action, starving thermo-electric power-stations of their vital cooling water, wrecking agricultural production, bringing traffic on the canals to a standstill. And all this could be accomplished at a relatively small cost in civilian life.

To compress into a few sentences years of work and frustration, Barnes Wallis invented the bouncing bomb. The task he set himself was to devise a bomb that would skip over protective anti-torpedo nets, make contact with the up-

river side of the dam structure, and then slide down the face of the dam to explode exactly thirty feet below the surface. In the end (as we now know), he succeeded perfectly. But he relied on others to deliver the bomb—or rather the many bombs to be aimed at a whole series of dams in the Ruhr Valley.

Early in 1943, Guy Gibson was chosen to form and lead the Lancaster squadron that was to be identified as 617. Not yet twenty-five, he was already a Wing Commander with exceptional experience over Germany, and a DSO and DFC. He had to learn—and train his men in—utterly new bombing techniques. The squadron's Lancaster bombers had to fly at a speed of 240 miles an hour and an exact 60 feet above the surface of the water, releasing the bomb 450 yards from the dam. No altimeter was exact enough to ensure accuracy of height, so two spotlights were fitted beneath the Lancasters



## Fly in the 'last of the Lancasters'!

There is only one surviving Lancaster (apart from a specimen preserved by the RAF), and a flight in this aircraft, together with cameras and other prizes, can be won in an easy competition for Revell modellers!

Send the coupon for details, rules and free Entry Form. No age limit—anyone can win!

● Only Revell's Lancaster kit is a true Dambuster model, with the secret weapon designed by Dr. Barnes Wallis. Make sure you buy a Revell True-to-life kit!

There are over 60 World War I and II aircraft in the Revell range—ask your Revell Stockist for details.



REVELL (GB) LIMITED  
Cranborne Road Potters Bar Hertfordshire Tel: Potters Bar 58261

at such an angle that their beams would converge at exactly 60 feet. So the aircraft on this most precise of all raids would actually be carrying lights!

The month of May was chosen for the raid, because the dams would then be holding back the maximum tonnage of water. The first aircraft took off at 21.10 hours on the 16th. Nineteen Lancasters in all took part in the raid—a total of 133 men. Some, like Gibson himself and his crew, were involved in two attacks (on the Möhne Dam and then the Eder) in the one night. One crew approached the Möhne Dam no fewer than six times before getting into position accurately to release their bomb... and returned safely home, though without the aircraft. They were shot down crossing the Dutch coast, and picked up from their inflatable dinghy. Two aircraft were shot down with a total of three survivors who became prisoners of war. Some never even reached their targets. Of the 133 who set out, only 80 survived.

But the operation was a success. Over 300,000,000 tons of water swept down the Ruhr Valley, accomplishing (in the words of the official German report) "a dark picture of destruction" within a few hours. Guy Gibson was decorated with the Victoria Cross by King George VI, but he and a number of other survivors of the dambusting raid of 16th May 1943 were killed on later raids.



To include 'The Dambusters' in the range of authentic Revell model kits is only a very small tribute to the heroism of these men, but it may help to keep alight a flame of memory down the years.

To Revell Limited,  
Cranborne Road,  
Potters Bar,  
Hertfordshire.

Please send Entry Form for the 'Last of the Lancasters' competition.

Name .....

Address .....

.....

.....

Post Code .....





# YOUR INTERNATIONAL MODEL MAIL ORDER HOUSE

Suppliers to the British and Overseas Governments



## HISTOREX ★★ NEW ★★

Imperial Guard Scouts 1813-14  
Mounted  
No. 172 1st Regt.—Scout  
Grenadiers  
No. 713 2nd Regt.—Scout  
Dragoons  
No. 714 3rd Regt.—Scout  
Lancers £1.65 each  
No. 715 Engineer Corps of  
the Guard  
1810-14 FOOT FIGURE  
Officer-N.C.O.  
Drummer or Soldier 80p each

## ★★★ TESTOR PAINTS

No. 10 Blue	No. 14 Yellow
No. 23 Green	No. 46 Metallic Silver
No. 33 Brown	No. 38 Grey
No. 45 White Gloss	No. 41 Wood
No. 48 Thinners	No. 50 Red Flat
No. 2 Lt. Pink	No. 52 Metallic Red
No. 5 Dk. Pink	No. 54 Metallic Green
No. 16 Flesh	No. 63 Flat Battle Grey
No. 27 Orange	No. 65 Flat Army Olive
No. 34 Purple	No. 44 Metallic Gold
No. 66 Flat Military Brown	No. 51 Metallic Copper
No. 68 Flat Arctic White	No. 53 Metallic Blue
No. 70 Flat Light Tan	No. 62 Flat Sky Blue
No. 30R Metal Flake Jade	No. 64 Flat Olive Drab
Green	No. 72 Flat Sea Blue
No. 67 Flat Desert Tan	No. 39R Metal Flake
No. 71 Flat Beret Green	Sapphire
No. 31R Metal Flake Purple	No. 69 Flat Cavalry Yellow
No. 8 Blue	ALL COLOURS AT 7p EACH
No. 29R Metal Flake Ruby	
Red	
No. 42R Metal Flake Lime	
Gold	



## Scale Model Soldiers

Collecting, modelling, assembling,  
painting and displaying

Roy Dilley

ALMARK PUBLICATIONS

## ★★ NEW ★★ FROM ALMARK SCALE MODEL SOLDIERS

by Roy Dilley  
A detailed practical  
guide to all aspects of  
making, assembling,  
converting and painting  
miniature military  
figures by an acknow-  
ledged expert.  
Hardback £2.00  
Paperback £1.50

**MODEL  
RAILWAYS IN  
'N' GAUGE**  
by Michael Andress  
A complete guide to  
modelling in the small-  
est of all modern rail-  
way gauges. Packed  
with ideas and tips.  
Hardback £2.00  
Paperback £1.50

## GERMAN NAVY WARSHIPS 1939-1945

By W. D. G. Blundell

This title provides the enthu-  
siast with a fully illustrated  
record of all the major fighting  
and support ships of the Kriegs-  
marine in World War 2. The  
main section includes intro-  
ductory texts which record events,  
actions, and developments rela-  
tive to each type of ship. With  
over 90 1:1,200 scale drawings,  
over 80 photographs and 3  
colour plates.  
Casebound Edition £1.90  
Paperback £1.25

## POST AND PACKING

Please add 10% to all  
orders up to £5.00 (min.  
10p). Over £5.00 post free.  
C.O.D. Charge 45p.

## ★★ A.M.T. KITS FROM U.S.A. ★★

Digger A.A. Fueller	£1.50	Ford Short Hauler Truck	£3.99	Peterbilt Cabover Truck and	
Peterbilt Truck	£3.40	Chevy Rescue Van	£1.99	Fruehauf Tank Trailer	£6.80
Peterbilt Cabover Truck	£3.40	Kenworth W-925 Tipper		Turnpike Train Kenworth	
Ford Dump Truck	£3.99	Truck	£3.40	Truck with Trailmobile and	
LNT-8000 Ford Truck	£2.75	Kenworth K-123 Cabover		Double Van Trailers	£8.90
Racing Car Transporter	£3.99	Truck	£3.40	Auto Carrier Ford Truck	
Fruehauf Tank Trailer	£3.40	Double Van Trailers	£5.50	and Transporter	£5.99
Fruehauf Box Trailer	£3.40	Giant Auto Transporter	£3.40		
Lowboy Trailer	£3.40	Peterbilt Wrecker	£4.75		
Chevy "Titan" 90 Truck	£3.40	Fruehauf Ext. Post Van	£3.40		
G.M.C. Astro 95 Truck	£3.40	Trailmobile Single Van	£2.99		
AM Lafrance Ladder Chief		Ford C-900 Stake Truck	£3.99		
Fire Engine	£6.80	Transmit Mix Cement Mixer	£5.50		
American Lafrance Pumper	£4.75	Peterbilt Truck and Box			
American Lafrance Chief	£6.80	Trailer	£6.80		

## ★★★ NEW MINITANKS ★★★

No. 250 ROCKET TANK AND ROCKET (USSR)	33p
No. 251 TANK COMMANDERS, E.D.W. AND U.S.S.R	14p
No. 252 TANK COMMANDERS BW. AND U.S.	14p
No. 253 U.S. M114 AND M114A1	17p
No. 254 U.S. M551- SHERIDAN	20p
No. 255 U.S. TENT FOR TEN MEN	11p
No. 257 BERGE PANZER LEOPARD	17p

## ★★★ NEW HASEGAWA KIT ★★★

CURTISS BF2C-1 1:32 SCALE £2.00

## ★★★ NEW L & S GUN KITS ★★★

S & W COMBAT MAGNUM 3 1/2" BARREL	£2.00
LUGER MODEL P/08	£2.00
WALTHER P-38	£2.00
S & W COMBAT MAGNUM 6" BARREL	12.00

## ★★★ AIRCAM AVIATION SERIES £1.25 each ★★★

1 North American P-51D Mustang	9 Spad Scouts	21 Kawasaki Ki.61-I/III Hien/Ki.100
2 Republic P-47 Thunderbolt	10 Lockheed P-38 Lightning	22 North American B-25C-H Mitchell
3 North American Mustang Mk I-IV North American P-51B and D Mustang	11 Consolidated B-24 Liberator	23 Vought Corsair F4U-1/7 Corsair
4 Supermarine Spitfire Mk. I-XVI Merlin Engine	12 Avro Lancaster	24 Hawker Hurricane Mk. I-IV
5 North American P-51 B/C Mustang	13 Nakajima Ki.43	25 Nakajima Ki.44-Ia/IIb Shoki
6 Curtiss (P-40) Kittyhawk Mk. I-IV	14 Republic F/RF-84F Thunder-streak/Thunderflash	26 Hawker Hunter
7 Curtiss P-41 Warhawk	15 Boeing B-17 Flying Fortress	27 Battle of Britain
8 Supermarine Spitfire—Griffon Engine	16 Mitsubishi A6M-Zero-Sen	28 Finnish Air Force
	17 North American F-86A-H Sabre Vol. I	29 Sharkmouth Vol. I
	18 Nakajima Ki.27	30 Sharkmouth Vol. II
	19 Grumman F6F/5 Hellcat	31 Czechoslovakian Air Force
	20 Canadair Sabre Mk. I-VI/ Commonwealth Sabre Mk. 30-32	32 Luftwaffe Vol. I
		33 Aerobatic Teams Vol. I
		34 Luftwaffe Vol. II

## ★★★ MEN-AT-ARMS SERIES £1.25 each ★★★

The Black Watch	Chasseurs of the Guard	Chasseurs of the Guard
The Stonewall Brigade	The Iron Brigade	The Iron Brigade
French Foreign Legion	Coldstream Guards	Coldstream Guards
Foot Grenadiers of the Imperial Guard	Waffen SS	Waffen SS

## NEW ★★ BADGER



## AIR-BRUSHES ★★

These Air-brushes are easy to use, adjustable from a very fine spray for touch-up or delicate painting such as 1/72 scale models and figures, etc., to full spray to cover large areas.

Model No. 200. Standard kit complete with six-foot Vinyl Air Hose, container Badger Propel Air valve, 1 oz. Paint jar, Air-brush Holder and instruction manual. £18.91

Model No. 200 De Luxe Kit with extra Paint Jars. £20.45

The above models are precision made with all metal components with Teflon bearings and seals. Used by professionals for painting, finishing, refinishing and touching-up.

Model No. 250 Hobby kit. Plastic and metal parts, with five-foot Vinyl hose, Air valve, mixing jar, Instruction folder and plastic case. £3.85

## PAINTS, TOOLS AND MATERIALS

Humbrol Authentic Sets 60p set Aircraft and Military all in stock Body Putty 20p. Flattening Agent 12p. Thinners 6p and 12p. Brush Cleaner 15p. Universal Cleaner 18p

## TOOLS

Craft Knife and 2 Blades 15p Spare Blades, No. 1, 2, 3 2 1/2p each

## X-ACTO TOOLS

No. 1 Knife 30p, No. 2 Knife 35p. Micro Saw 30p. Pin Vice 57p. Razor Saw and 2 Blades 90p

White Plasticard (13" x 9"): 10 thou.—5p, 15—7 1/2p, 20—8p, 30—11p, 40—16p, 60—24p Clear: 10 thou.—9p, 20—11p Plastic Rod Asstd. 25p. Micro Strip Asstd. 25p Metal Skin Gloss or Matt 25p